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AGRICULTURAL MARKETING IN INDIA

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REPORT
ON THE
MARKETING OF CHILLIES
IN
INDIA

Directorate of Marketing and Inspection,
Ministry of Food and Agriculture
Government of India

Published by the Manager of Publications, Delhi.

Printed at the National Herald Press, Lucknow.
1957

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PREFACE

This publication is in continuation of the series of marketing surveys of the Directorate of Marketing and Inspection. This is the first report in the series on the survey of vegetables in India.

Chilli is an important condiment crop grown on an extensive scale all over India both as a garden and field crop. The production of chillies is estimated at 79,87,427 maunds (green) and 99,15,866 maunds (dry) chillies occupying an area of 11,97,860 acres. There are many varieties differing mainly in size, shape and pungency of the fruit. A large quantity of dry chillies is consumed within the country. There is a considerable export trade, the principal importing countries being Ceylon and Straits Settlements.

The information collected on this crop has been presented in 11 chapters. The first three chapters are devoted to supply, demand, prices, imports, exports, net available supplies, quantitative and qualitative demand. Preparation for the market, assembling and distribution are discussed at length in three chapters which follow. Chapters VII and VIII deal with problems of storage and transportation, respectively In the next three chapters information on growers and traders' association dealing in chillies, finance and other item like cultivation, etc., have been dealt.

Important recommendations have been made in respect of need for improving market intelligence, improvement in methods of storing, grading and packing, development of co-operative societies for assembling and distribution, desirability of regulated markets and finally arrangements for meeting the financial requirements of the producers and also introduction of improved methods of cultivation and encouraging the use of good quality seeds.

This publication has become possible through the co-operation of the State Marketing Officers who supplied as much data and information on the subject as they possibly could. Thanks are due to them. Thanks are

also due to the producers, fruit merchants, exporters, traders associations, State and Central Government Departments and others who kindly extended assistance and co-operation in carrying out this survey.

The Government of India should not be regarded as assuming responsibility for all or any of the statements contained in this report.

The report was compiled by Shri Parduman Singh, Marketing Officer under the guidance of Shri K H Advani, Senior Marketing Officer of this Directorate.

(M. B. GHATGE)
Agricultural Marketing Adviser to the Govt. of India.

NEW DELHI,
12th July 1954.

CHAPTER I—SUPPLY

GENERAL

Chillies belong to the genus *Capsicum* of *Solanacede* family. Although the crop is produced in almost all parts of India, it is not indigenous to this country. It finds no mention in the old Indian literature and there is no *Sanskrit* name for it. This shows that this plant was not known in Asia until modern times.* Watt says, "there would seem to be little doubt that the entire series of plants constituting the genus *Capsicum* are natives of tropical America". The plant has been found growing wild on the banks of the Amazon and in Eastern Peru in South America. No Indian botanist has ever recorded having found a species of *Capsieum* in wild condition. On the basis of the available information Watt concludes that the introduction of this plant into India may have taken place somewhere about the middle of the 17th Century. The plant was evidently introduced here by the Portuguese from West-Indies. Within a short period of three centuries, it has spread widely all over India.

(1) INDIA'S POSITION IN THE WORD TRADE

Columbus is said to have introduced chillies into Europe and now they are produced all over that Continent. The crop is of considerable importance in Southern Europe, especially in Spain, Greece and Hungary. The last named country is famous for producing pungent varieties. The crop is produced on a large scale in tropical America, as well as, other countries in the tropical zone. Amongst the minor crops of India, chillies have a pre-eminent position. International trade in chillies, however, appears to be on a small scale. No reliable data are available to show the amount and trend of chillies trade in different countries of the world. Hence it is not possible to indicate the position that India occupies in the world trade. This country, however, has small steady and lucurative exports of chillies to foreign countries, the most important destination being Ceylon.

(2) HOME PRODUCTION

(*a*) *Acreage and trend*: No separate statistics of area and production relating to chillies are, published by different States in India, except Madras, where these are given in the "Season and Crop Report". Chillies are usually ground with "Condiments and Spices" in the Agricultural Statistics, but when produced as a garden crop and sold in green form, they are included in the head "Fruits and Vegetables". Sometimes chillies are mixed with other crops also. It is of the utmost importance that detailed statistics of area and production of each important

*De Candolle, Alphonso, Origin of cultivated plants.

†Watt, George. The Commercial products of India.

agricultural commodity should be available, if planned production is to be attempted on a national scale. The figures given in this Report are based on estimates drawn by the Marketing Staff after thorough enquiries from he State Agricultural and Revenue Departments, producers, traders, consumers, etc.

(*i*) *Acreage*: Chillies can be produced on different types of soil, varying from clay to sandy loam. They are grown successfully both as a rainfed and as an irrigated crop. The estimated area under chillies in India, based on the average of 5 years ending 1949-50, is 1,197,860 acres, as shown in Appendix No. 1. The most important chilli producing States are Madras, Hyderabad, Bombay, Madhya Pradesh, Mysore and Bihar, which together account for 88.9 per cent of the total estimated area under chillies. Madras State is the largest producer of chillies having 334,140 acres, constituting 27.9 per cent of the total estimated area under chillies in India. The share of each important chilli producing State is illustrated in diagram facing this page and the map facing page 3. Table No. 1 below shows the relative importance of chief producing areas, based on the average of the 5 years period, ending 1949-50.

TABLE NO. 1

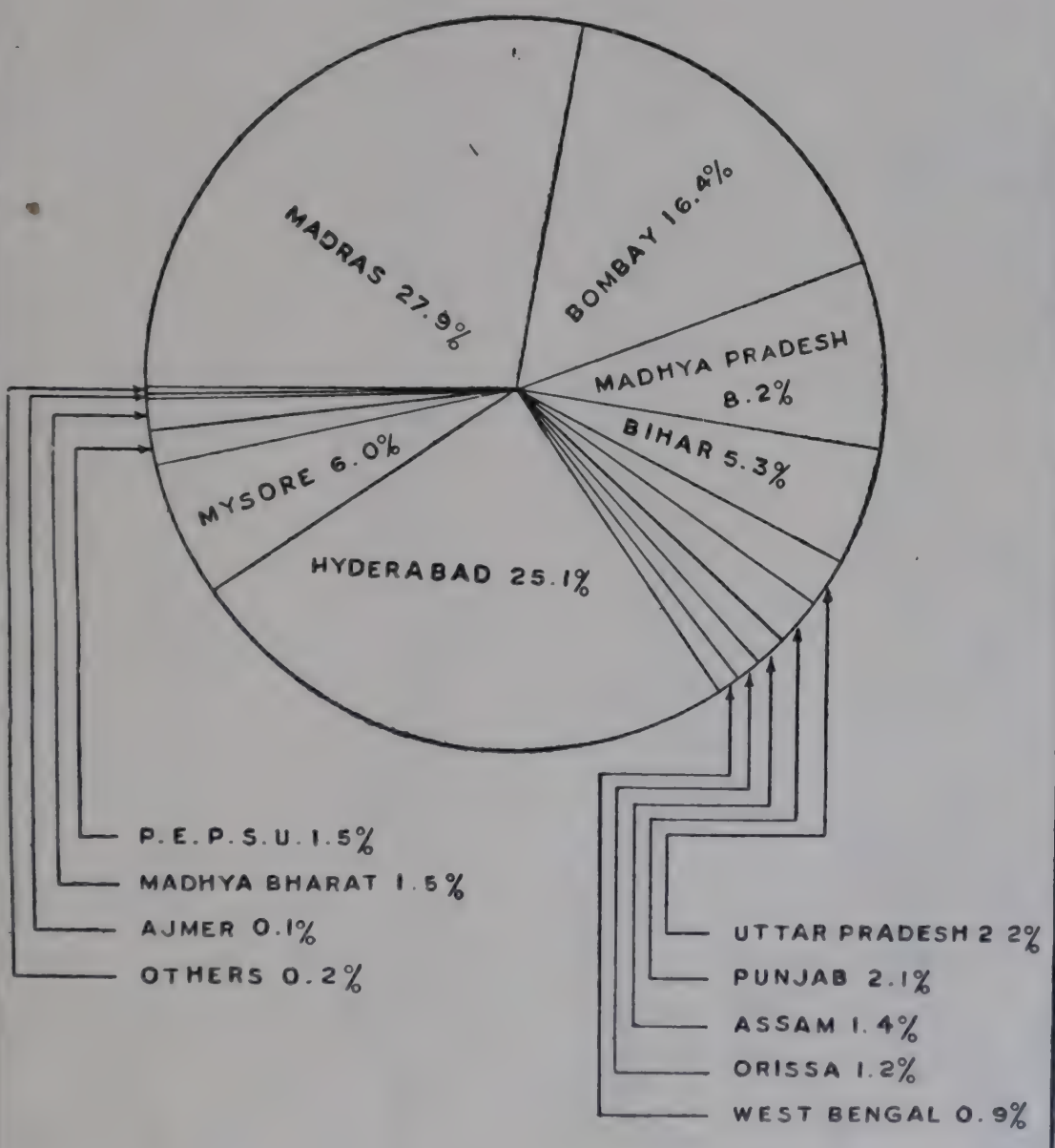
Area under chillies in different States
(*Average for the years* 1945-46 to 1949-50)

State	Acres	Percentage
Madras ..	334,140	27.9
Bombay ..	196,680	16.4
Madhya Pradesh ..	97,900	8.2
Bihar ..	63,100	5.3
Uttar Pradesh ..	26,440	2.2
Punjab ..	25,620	2.1
Assam ..	16,400	1.4
Orissa ..	14,320	1.2
West Bengal ..	11,340	0.9
Hyderabad ..	300,440	25.1
Mysore .	72,120	6.0
Patiala and East Punjab States Union ..	18,100	1.5
Madhya Bharat ..	17,700	1.5
Ajmer ..	1,560	0.1
Others ..	2,000	0.2
Total	1,197,860	100.0

It will be observed that after Madras, Hyderabad has the largest acreage and that the production is concentrated in the peninsular area ; Madras, Hyderabad and Mysore together con-

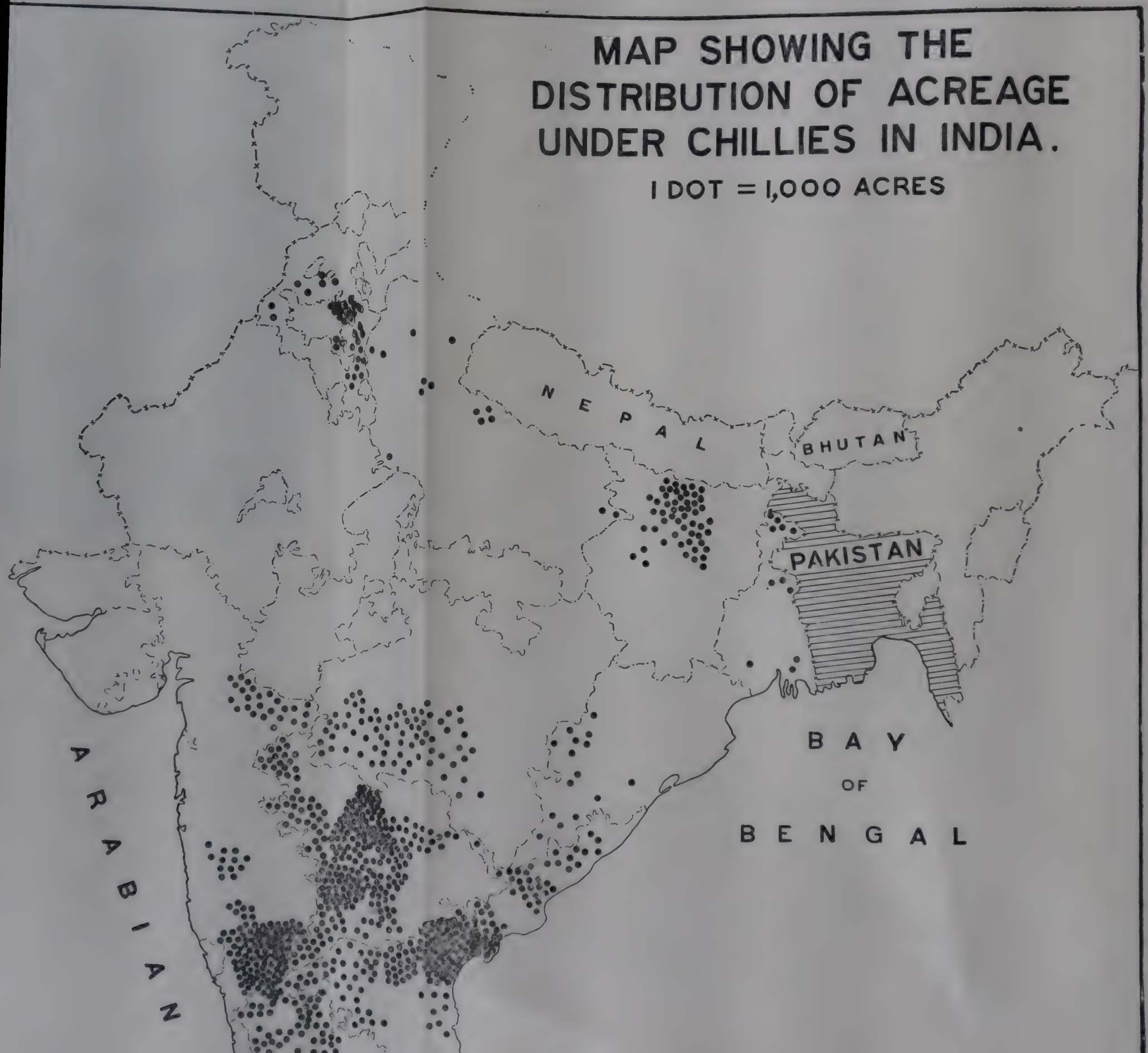
[Facing page 2

SHARE OF IMPORTANT STATES IN THE ALL-INDIA ACREAGE OF CHILLIES.



MAP SHOWING THE DISTRIBUTION OF ACREAGE UNDER CHILLIES IN INDIA.

1 DOT = 1,000 ACRES



stituting 59.0 per cent of the total estimated area under chillies in India.

(*ii*) *Distribution of area*: *Madras*: The most important districts are Guntur, Kurnool, East Godavari, Tirunelveli, Bellary, Ramanathapuram and Krishna, which together account for 57.9 per cent of the total estimated area under chillies in the Madras State. Guntur has the largest area *viz.* 72,460 acres on the average, or 21.7 per cent of total area under chillies in the State. The next most important district is Kurnool with 35,040 acres. The area in other districts mentioned above varies from 13,630 acres to 22,200 acres. The other districts which have a fairly large area (*i.e.*) over 10,930 acres each, are Tiruchirapalle, Anantapur, Salem, Nellore, Visakhapatnam and Coimbatore and these together account for 21.6 per cent of the total area under chillies in the State. Chillies are produced in the other districts also but on a smaller scale.

Bombay: In the Bombay State, the most important, chilli producing districts are Dharwar (82,250 acres), Belgaum (21,700 acres), West Khandesh (15,000 acres,) Satara (11,900 acres) and East Khandesh (10,200 acres), which together account for 73.2 per cent of the total area under chillies. Other districts of lesser importance are Ahmednagar, Poona, Nasik and Sholapur. Smaller quantities of chillies are produced in the other districts.

Madhya Pradesh: Nagpur with 16,090 acres, Chanda (12,950 acres), Amravati (12,610 acres) Yeotmal (8,550 acres) and Buldana (8,220 acres) are the main chilli producing districts in Madhya Pradesh. They have 59.6 per cent of the total area under chillies in the State. The two other important districts are Bhandara and Akola, each having more than 6,000 acres. Chillies are grown in the other districts also, to a lesser extent.

Bihar: The districts of Darbhanga, Monghyr and Muzaffarpur are the most important producing areas of chillies in Bihar and account for 72.0 per cent of the total area under chillies in the state. Darbhanga has the largest acreage under chillies *viz.*, 21,100 acres followed by Monghyr (15,800 acre) and Muzaffarpur (8,610 acres), Patna and Gaya districts account for another 9.9 per cent of the area under chillies in Bihar. The remaining area is spread over the other districts, namely, Shahabad, Saran, Champaran, etc.

Uttar Pradesh: Chilli crop covers less than 26,500 acres in Uttar Pradesh and as such is one of the minor crops of the State. The districts of Kheri and Rampur together have 24.9 per cent of the area, their average estimated acreage being 3,750 and 2,8. acres respectively. Muzaffarnagar, Ballia and Garhwal districts have, on the average, 2,110; 1,580 and 1,470 acres respectively and account for 19.6 per cent of the area. The remaining 55.5 per cent of the area is distributed over the other 47 districts.

The Punjab: The districts of Karnal, Rohtak, Ferozepur and Jullundur with 8,210; 5,040; 4,020 and 2,830 acres respectively

control more than 78.4 per cent of the total area under chillies in the State. The remaining area is spread over the other districts; the chilli production in the districts of Simla and Kangra being insignificant.

Assam: Goalpara and Kamrup are the two most important chilli producing districts in Assam, having 4,500 and 3,000 acres respectively and together account for 45.7 per cent of the total area under chillies in the State. Amongst the other districts, only Cachar, Darang and Nowgong have more than 1,500 acres each.

Orissa: The production of chillies is concentrated in Koraput and Balangir-Patna districts, which with 5,120 and 3,940 acres respectively account for 63.2 per cent of the total area under chillies in the State. Sambalpur district with 2,770 acres accounts for another 19.4 per cent. The remaining acreage under chillies is distributed over the other districts.

West Bengal: The districts of West-Dinajpore, Murshidabad and 24-Parganas with 4,870; 1,580 and 1,570 acres respectively under chillies have 70.8 per cent of the total area under chillies in the State. Midnapore and Nanda districts have 950 acres and 770 acres respectively under chillies, and account for another 15.2 per cent of the total chilli area. The other districts do not produce chillies to any appreciable extent.

Hyderabad: The area under chillies in the Hyderabad State is more or less evenly distributed but the more important districts are Gulbarga (44,640 acres), Nander (39,920 acres) and Bidar (24,650 acres), which together account for 36.4 per cent of the total area under chillies in the State. Other districts of lesser importance are Raichur, Mahboobnagar, Aurangabad, Karimnagar and Medak and have acreage under chillies ranging from 16,080 to 21,520 acres. These five districts account for 30.2 per cent of the area under chillies in the State.

Mysore: Chitaldrug district has the largest concentration of area under chillies, having about 16,560 acres on the average, and it accounts for 23.0 per cent of the total area under chillies in the State. Tumkur, Chikmagalur and Hassan are the other important districts and together account for another 40.6 per cent of the area. The remaining acreage is scattered over the other districts.

Patiala and the East Punjab States Union: Patiala (9,810 acres), Fatehgarh Sahib (3,620 acres) and Sangrur (3,390 acres) districts together, account for 86.9 per cent of the total area under chillies in the State. The remaining 13.1 per cent of the area is distributed over the other districts.

(*iii*) *Irrigated and non-irrigated*: As stated earlier chillies are produced under both irrigated and non-irrigated conditions. No reliable statistics, however, are available to show the exact acreage under the non-irrigated and irrigated crops. Estimates have however, been drawn and the available information is discussed below. In the Madras State, a major proportion of the

crop is rainfed. In the Bombay State about 60 per cent is rainfed while the rest is irrigated. In Madhya Pradesh, un-irrigated crop constitutes 71 per cent of the total area under chillies. In Bihar, Punjab and Assam a major proportion of the area is rainfed while in Orissa, irrigated crop covers a larger proportion of the total area under chillies. In West-Bengal about 94 per cent of the chilli crop is non-irrigated. In the Hyderabad State about 58 per cent of the total area under chillies is non-irrigated. On the basis of the foregoing discussion, it is safe to conclude that a major proportion of the chilli crop is produced under *barani* conditions.

(*iv*) *Trend*—In the absence of reliable published record it is difficult to discuss the trend of acreage under chillies. The area under chillies varies from year to year depending on such factors as favourable weather conditions at the time of sowing and transplanting and prevailing prices, etc. Available information is discussed below :

In the Madras State, the area under chillies was on the decline from the year 1939-40 onwards. This tendency persisted up to the year 1941-42. Thereafter, it increased in the next two years in sympathy with the increase in prices. There was a set-back in the year 1944-45 presumably on account of the restrictions on exports imposed by the State Government in the year 1943-44. The upward move started again in the following year with the increase in prices. The highest acreage was recorded in the year 1947-48. There has been some reduction in the area in the following two years presumably due to successive failures of monsoon. Table No. 2 below shows the area under chillies in the Madras State, during the years 1938-39 *to* 1949-50.

TABLE NO. 2

Area under chillies in the Madras State
(1938-39 *to* 1949-50)

Year	Acres.
1938-39	334,800
1939-40	326,900
1940-41	304,200
1941-42	289,900
1942-43	319,200
1943-44	339,800
1944-45	285,100
1945-46	290,500
1946-47	365,100
1947-48	365,300
1948-49	336,000
1949-50	313,800

The trend of acreage under chillies in the Bombay State can be seen from Table No. 3 given below :

TABLE NO. 3

Area under chillies in the Bombay State
(1938-39 *to* 1949-50)

Year	Acres
1938-39	172,300
1939-40	190,300
1940-41	176,900
1941-42	151,000
1942-43	165,300
1943-44	179,700
1944-45	152,700
1945-46	172,100
1946-47	190,000
1947-48	209,000
1948-49	178,800
1949-50	233,500

It will be observed that the trend of acreage in the Bombay State is like that of the Madras State up to the year 1948-49, except in the year 1939-40, when the acreage in the former increased as against a decrease in the latter. Moreover, the acreage under chillies in the Bombay State went up appreciably in the year 1949-50, as against a decline in the Madras State in that year.

In Madhya Pradesh, as shown in Table No. 4 below, the trend of acreage during the years 1942-43 to 1949-50 has been almost similar to that in the Bombay State, except that there was an increase in acreage in Madhya Pradesh in the year 1948-49 as against decline in the Bombay State. No information is available in regard to the years preceding the year 1942-43.

TABLE NO. 4

Area under chillies in Madhya Pradesh
(1942-43 *to* 1949-50)

Year	Acres
1942-43	77,100
1943-44	90,800
1944-45	78,900
1945-46	80,700
1946-47	85,400
1947-48	103,500
1948-49	105,800
1949-50	114,100

Table No. 5 below shows the trend of acreage under chillies in Bihar :

TABLE NO. 5

Area under chillies in Bihar
(1941-42 *to* 1949-50)

Year	Acres
1941-42	48,500
1942-43	42,900
1943-44	42,600
1944-45	45,400
1945-46	51,200
1946-47	55,100
1947-48	54,100
1948-49	81,500
1949-50	73,600

It will be observed that the trend of acreage under chillies in Bihar has been rather different from the States mentioned earlier. The acreage went down in the years 1942-43 and 1943-44 due to the utilisation of some of the chilli producing area for growing food crops. In the recent years however, the acreage under chillies has steadily increased due to favourable prices and comparative freedom from the operation of price control. Another factor has been the imposition of excise tax on tobacco, which has resulted in the diversion of some area from tobacco to chillies.

In Uttar Pradesh, the acreage under chillies has ranged from 21,500 to 29,200 acres, during the years, 1942-43 to 1949-50. The lowest acreage was recorded in the year 1943-44 and the highest in 1947-48. There was a decline in the year 1948-49 but the acreage increased again in the following year. No regular trend is visible in acreage under chillies in Uttar Pradesh.

In the Punjab, the annual area under chillies depends upon the factors already mentioned above, as well as, the availability and prices of *gur,* which also effect the chilli acreage to a certain extent. If the prices of *gur* are high the chilli production is affected adversely. A perusal of Appendix I will show that the area under chillies has been on the increase in the recent years. The drop in the area in the year 1948-49 was mainly due to unsettled conditions after the partition of the country, which directly affected the Punjab.

In Orissa, as shown in Table No. 6 below, the trend of acreage under chillies is irregular, depending upon seasonal factors, as well as, supplies of chillies from other States.

TABLE NO. 6

Area under chillies in Orissa.
(1938-39 *to* 1949-50)

Year	Acres
1938-39	15,760
1939-40	15,020
1940-41	12,750
1941-42	11,740
1942-43	14,100
1943-44	13,700
1944-45	17,900
1945-46	19,800
1946-47	12,800
1947-48	14,300
1948-49	12,000
1949-50	12,700

The area was on the decrease up to the year 1941-42 but increased from 1942-43 onwards, primarily due to high prices and restricted imports. The decrease in the year 1946-47 was due to heavy imports and diversion of some area to food crops. The acreage in the year 1949-50 was almost the same as in 1946-47.

In West Bengal the acreage under chillies does not vary much from year to year, as most of the produce is utilised in green form. Secondly the acreage under chillies is very low.

The trend of acreage under chillies in the Hyderabad State is given below, in Table No. 7.

TABLE NO. 7

Area under chillies in the Hyderabad State
(1940-41 *to* 1949-50)

Year	Acres
1940-41	253,500
1941-42	239,700
1942-43	254,400
1943-44	333,700
1944-45	229,600
1945-46	233,900
1946-47	281,400
1947-48	335,000
1948-49	325,100
1949-50	326,800

PLATE NO. 1.

Madras

Guntur *Pettai* *Ramnad*

Varieties of chillies produced in the Madras State

[Facing Page 8

PLATE No. 2.

Madras

Parikai

Pattukottai

Varieties of chillies produced in the Madras State

The trend in Hyderabad has been irregular. The area decreased in the year 1941-42, but increased appreciably in the next two years. There was a steep decline in the next year due to restriction on exports. The area showed an increase again in the following years as a natural consequence of increasing prices.

In Mysore also, the trend of acreage under chillies has been irregular. Table No. 8 below, shows the area under chillies in Mysore from the year 1940-41 onwards.

TABLE NO. 8

Area under chillies in the Mysore State

(1940-41 *to* 1949-50)

Year	Acres
1940-41	71,800
1941-42	74,700
1942-43	65,800
1943-44	80,700
1944-45	84,600
1945-46	66,900
1946-47	68,400
1947-48	70,100
1948-49	71,400
1949-50	83,800

It will be observed that there was a marked increase in the acreage under chillies in the year 1949-50, as compared with the preceding four years, but on the whole the trend of acreage has been irregular.

The trend in the acreage under chillies in other areas also was dependent on factors already mentioned above, such as climatic conditions, prices, etc. Appendix No. 1 shows that on the whole there has been a tendency towards an increase in acreage under chillies.

(*v*) *Proportion of area under important varieties: Notes on their quality factors.*—As stated earlier, chillies were introduced into India in the 17th Century. No attention was paid to the work of classification of the varieties till 1924, in which year the Imperial Council of Agricultural Research (now, Indian Council of Agricultural. Research) initiated an investigation with the object of isolating different types of chillies growing in India as a first step to the study of inheritance of characters in the crop, the ultimate aim being to obtain types of better quality and superior yield. As many as 52 types were described and classified by 1928*. The classification was based on the number of

* Memoirs of the Department of Agriculture in India. Studies in Indian chillies (1) The type of Capsicum. September 1923. Botanical Series—Volume XVI No. 2

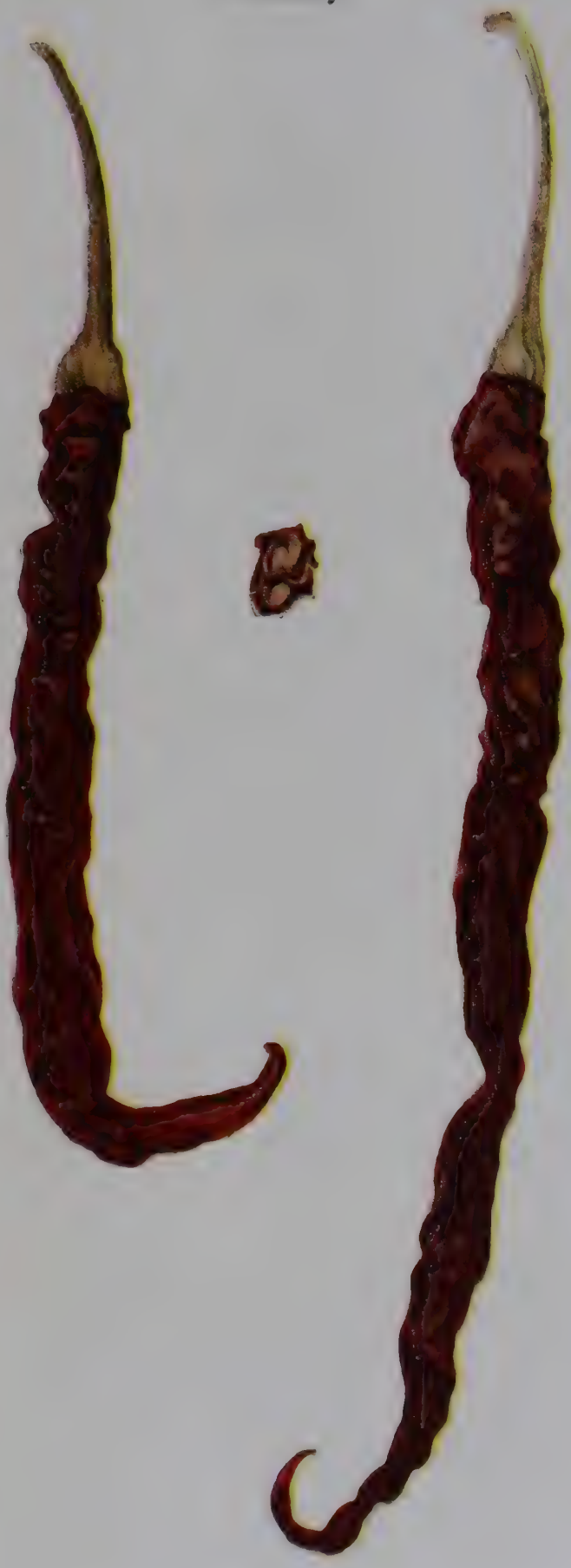
pedicels in the axil, colour of flowers, shape of transverse section of the fruit, position of the fruit, maturity, height of the plant and character of the stem This classification except for its scientific value is not of much use in the trade, where different varieties are distinguished mainly by their colour, size, pungency, seed content, etc. Different varieties of chillies are usually known by the name of the place at which they are produced. Chillies produced in particular areas are prized by particular set of consumers. The characteristics of important varieties of chillies produced in the different States are described in Appendix No. II and their importance in the producing areas is discussed below:

Madras: In the Madras State, chillies are divided broadly into two main groups, based on the colour of the fruit, *viz.*, orange and red groups. The former is confined mainly to Visakhapatnam and West Godavari districts while the other districts produce only the latter. The red chillies are of different types, *viz.*, (1) Thin long fruits, (2) medium sized fruits, (3) short, conical fruits and (4) thin and small fruits. Orange coloured chillies are in great demand for pickling while the red chillies are mainly utilised for culinary purposes. The fourth type of the red chillies having thin and small fruits, is not produced on a commercial scale but grown in kitchen gardens for day to day use. Orange coloured chillies are estimated to have 3 per cent of the total area under chillies in the Madras State. Thin, long, red chillies cover about 31 per cent of the total area while the medium red and short, conical red varieties are estimated to have 52 and 14 per cent under them respectively. The trade, however, classifies chillies according to the place of their production and the well known types are Guntur chillies, Rajahmundry chillies, Pattai or Sathur chillies, Tiruvannamalai chillies and Golaporalu chillies Other common types are Ramnad, Pattukottai, Parikai and Mysore chillies. (See plate Nos. 1 and 2 between pages 8 and 9.)

Bombay: Numerous varieties of chillies are produced in the Bombay State. Those produced in the Dharwar district can be broadly divided into 4 classes namely (1) *Dhonnakai*, *i. e.*, big, round with thick flesh, (2) thin, long types, (3) medium, broad and long types and (4) broad, long types. But the trade has divided the chillies of this area into 5 classes, which are named after the place of production and are known as *Sankeshwar Angikashi*, *Sankeshwar medium Masur* or *Byadgi Kaddi*, *Masur* or *Byadgi adatar* and *Dabbi* or *Dabakai*. Of these *Kaddi* is the most important and it covers about 70 per cent of the chilli area in the district. Dabbi covers another 24 per cent. In Kaira district, thin-skinned, long chillies are grown but they are not known by any particular name. Mixed types are grown in Baroach, Panchmahal, Ahmedabad and Bijapur districts. Surat district has two common varieties, *viz.*, long and short. Thana district is well known for its *Tarapuri* and *Shirgaon* varieties which are mainly consumed in green condition. Ahmedabad district produces mainly *Gaorani* (indigenous) chillies, while

PLATE No. 3

Bombay



Dharwar

Varieties of chillies produced in the Madras State

Plate No. 4
Bombay.

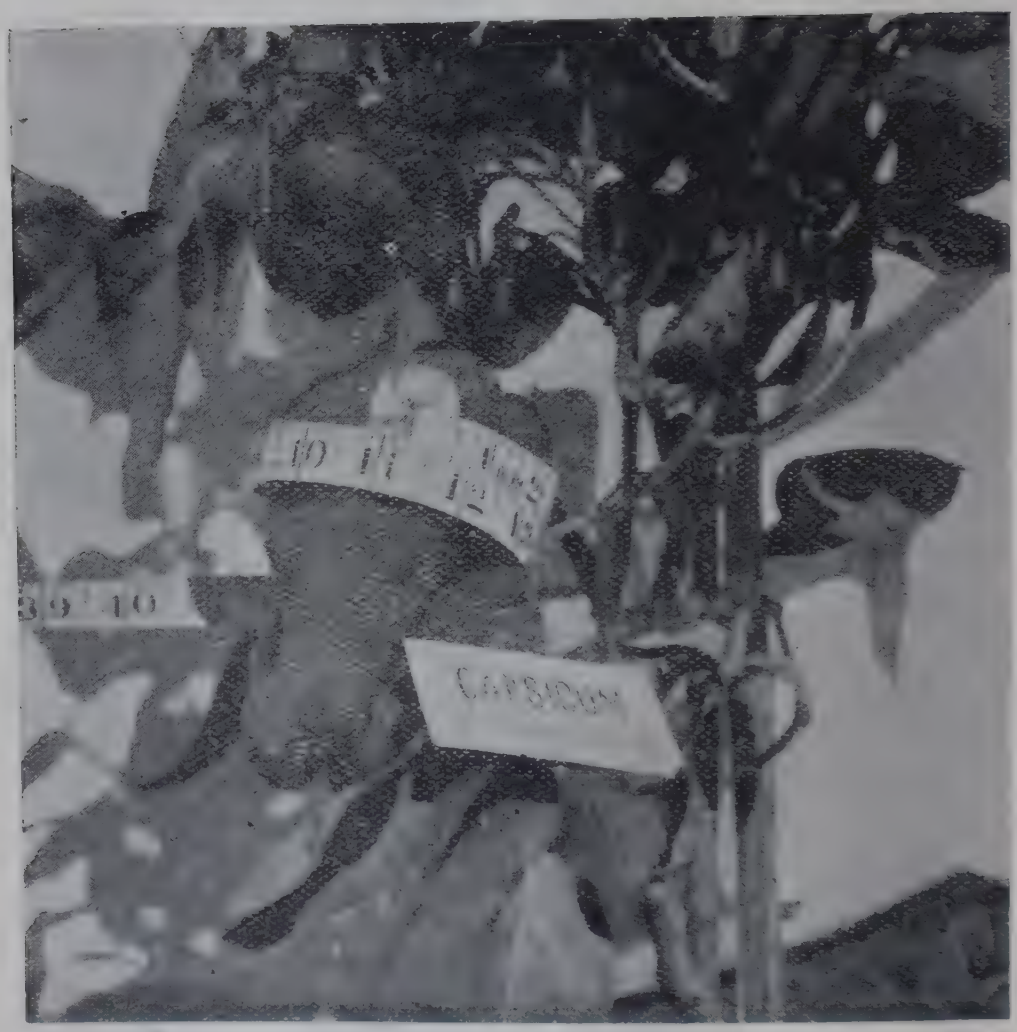
Sankeshwar Kaddi Dabbi Adatar Lavangi

Varieties of Chillies produced in the Bombay State.

Facing page 11]

Plate No. 5

Bombay



By courtesy of Shri J. Bhiladwala of Pardi, Bombay.

Sherangli and *Dhobli* are the two varieties most commonly grown in Nasik district. There are seven different types of chillies, including *Bhopli* and *Surali* produced in West Khandesh while the common varieties in East Khandesh are *Sindkhedi Dhobli* and *Lavangi*. In the Poona district local varieties of chillies known as *Deccani* and *Sankeshwari* are produced. (See plate Nos. 3 to 5 between pages 10 and 11.)

Madhya Pradesh: There are numerous non-descript types of chillies produced in Madhya Pradesh and they are generally found mixed. Each trade variety actually consists of a number of varieties and is usually named after the trade in which it is produced. There are three main trade groups namely, (1) Red (2) Yellow and (3) *Dhobli* (large size). Red chillies cover about 80 per cent of the area under chillies in the State. Important varieties included in the "red" groups are *Malkapur Ellichpur Bhivapur* and *Umrer* chillies. Other red type chillies of lesser importance are *Jamalgota* of Chanda district, *Pandhurna* of Chhindwara district and *Deori Niamari, Samingana etc.* Yellow chillies occupy about 15 per cent of the area and they are most popular in the Berar tract. *Dhobli* (large size) chillies are mostly consumed in green form as a vegetable or for pickling and *chutny*. These chillies are generally grown in the vicinity of the cities and towns and are variously known as *Khafri Mirchi, Bhopla Mirchi, Bhedra, Dhobri, Ghogla* etc. (See plate Nos. 6 and 7 between pages 12 and 13).

Bihar: Three main types of chillies are produced in the State of Bihar. The first consists of long, thin chillies variously known as *Rarhi, Sitti, Patarki, Patli Mirchi* or *Pattaniya*. These cover about 80 per cent of the area under chillies in the State and being very pungent are used as a spice and utilised in curries and soups, etc. Long, broad chillies locally known as *Mota* or *Motki Mircha*, have 15 per cent of the area under them and are mainly used for preparing pickles. The balance, *viz.*, 5 per cent of the area is under small chillies, named *Longia or Chotki Mircha*, which are generally consumed in green form. (See, plate Nos. 8 and 9 between pages 14 and 15).

Uttar Pradesh: In Uttar Pradesh, there are many varieties of chillies and generally they are grown mixed. The most prominent varieties are: (1) *Desi* (indigenous), (2) *Gorakhpuri*. (3) *Ramanagar* (*Asli Kashipuri*), (4) *Dhanauri* (*Nakli Kashipuri*) and (5) *Lakhimpur*. The main chilli crop of the plains consists of *Desi* chillies and the area covered by them is estimated to be 68 per cent of the area under chillies in the State. A major proportion of these chillies is consumed fresh. *Gorakhpur* variety occupies about 10 per cent of the total acreage under chillies and is utilised mainly for pickling. This variety is popular in the eastern districts of State. *Dhanauri* and *Ramnagar* varieties are estimated to cover 7 and 5 per cent respectively of the total chilli area. *Dhanauri* commonly grown in Naini Tal and Rampur districts, while *Ramnagar* variety is popular in the Naini Tal and Almora districts. Lakhimpur chillies cover about 5 per cent of the chilli area in the State and are mainly produced in Kheri district. The remaining 5 per cent

of the area is under varieties like *Kairana yellow*, *Kairana red* and *Sagia*. (See plate Nos. 10 to 13 between pages 18 and 19.)

Punjab: The growers generally pay little or no attention to the selection of varieties. Usually seed from the previous year's crop is saved for raising seedlings. Failing that, seedlings are purchased from nurserymen in the neighbourhood, without any attention being paid to particular varieties. As such, there is a great variation in size, shape, colour and quality of chillies grown in different areas and they are generally known by the name of the locality, where they have been produced over long periods. However, certain varieties have been found to command preference in particular tracts. The most important varieties are: (1) *Nakli Patna*, (2) Chotta Phal also known as *Khopra* or *Panipati*, (3) *Lamba Phal*, (4) *Ferozpur* chillies, (5) *Mianwal* chillies, (6) *Talwan* or round chillies, (7) *Amritsari* or *Sawrian* chillies. *Nakli Patna* chillies are grown mainly in Rohtak and Karnal districts. *Chhota Phal* chillies are also popular in these two districts though more so in Karnal. The production of *Lamba Phal* is also mainly confined to Rohtak and Karnal districts. *Ferozepur*, *Mianwal* and *Talwan* chillies are produced mainly in Ferozepur and Jullundur districts. They originally belong to the places, after which they are named Yellow chillies are grown in Ambala and Kangra districts *Sawrian* chillies are mainly produced in Sawrian tract of Amritsar district There is a small area under *Simla mirch* in Simla and this variety is exclusively used as a vegetable. It is estimated that 27.1 per cent of the total chilli area in the State is under *Nakli Patna* variety and 23.8 per cent under *Mianwal* and *Ferozepur* varieties. Area under *chhota phal* is estimated to be 18.4 per cent. *Lamba phal* has 9.4 per cent of the total chilli area, while anothr 9.3 per cent is under *Talwan* and *Sawrian* varieties. The remaining 12 per cent is under non-descript varieties. (See plate No. 14 facing page 20).

Assam: The popular varieties of chillies grown in the State of Assam are (1) *Balijuri Amnia* or *Balijuri Patalparia*, (2) Balijuri *Ausha*, (3) *Garo* chillies, (4) *Naga* chillies, (5) *Surjya-mukhi*, (6) *Jaintapuri* (7) *Narayankhola* and (8) *Krishnamukhi*. The first three varieties and *Narayankhola* are produced mainly in the lower Assam valley. *Naga* chillies are confined to the upper Assam valley. *Surjyamukhi* and *Krishnamukhi* varieties are mainly utilised in green stage and are found all over the State. *Jaintapuri* chillies are produced in the Surma valley.

Orissa: Three varieties of chillies namely *Dakhini Suryamukhi* and *Dhanua* are commonly grown in the Orissa State. *Dakhini* or *I. P. 46A* is the most important variety having 75 per cent of the total chilli area under it and is commonly produced in Ganjam, Koraput and Sambalpur districts *Dakhini* variety is of two types *viz. Kala* (black) and *Dhala* (white). Suryamukhi variety covers about 12 per cent of the total chilli area and is found all over the State. Area undr *Dhanua* variety is estimated at 6 per cent of the total area. This variety is

PLATE NO. 6

Madhya Pradesh

Malkapur

Varieties of chillies produced in the Madhya Pradesh State

PLATE NO. 7.

Madhya Pradesh

Bhiwapur

Ellichpur

produced mainly in the hilly and forest tracts of Angul, Sambalpur, Koraput and Ganjam districts. Other varieties of lesser important are *Kangodia Paunsia*, *Badamiricha* and *Sinipuria*. (See plate Nos. 15 to 17 between pages 20 and 21.)

West Bengal: As stated earlier, West Bengal produces mainly green chillies and as such, no attention is paid to varieties. Sometimes the same varieties of chillies is known by different names in different localities. Some types, however, are localised in particular areas. For instance, in West Dinajpur, 95 per cent of the chilli area in the district is under *Sitim* variety, while in Malda district, *Deshi* (local) and *Paschima* varieties cover 60 and 20 per cent of the chilli area respectively. In the Murshidabad district, *Sibra* variety is most important, having 80 per cent of the chilli area under it. The chilli area in Midnapore district is equally divided between *Dhani* and *Suryamukhi* varieties.

Hyderabad: The varieties of chillies commonly grown in the Hyderabad State are *shivala* or *shankeshwar*, *Gati* or *local Laungia*, *Moti mirch* and *Vilayat mirch*. The first three varieties, are the most important and a major proportion of the area is under them.

Mysore: In the Mysore State, chillies are broadly classified as *Goribidnur*, *Javari* or *Tiptur* and *Mysore* varieties. The short types are generally sold in green form while the round ones being less pungent are used as a vegetable. The long types are utilised in the form of spices. (See plate No. 18 facing page 22.)

Patiala and the East Punjab States Union: The three most common varieties of chillies are *Sanauri Samana* and *hill* chillies. A major proportion of the area is under *Sanauri* chillies.

It will be observed that there are numerous varieties of chillies produced in different States. There is no doubt, that in a vast country like India, the number of varieties grown for the market cannot be restricted to just a few, because of the regional differences, seasonal variations, difference in market demand, etc. But at the same time the aim should be to restrict the production to those varieties only, which are excellent both in quality and in yield. Some of the States have varieties of outstanding merit and it would be an immense gain, if the resources of all the producing areas were pooled together and the best varieties of different areas tried in tracts having similar climatic and soil conditions, etc. It is desirable that there should be a planned and concerted action to make the chillies industry progressive. In this connection full advantage should be taken of the work already done at the Indian Agricultural Research Institute.

(b) *Yield per acre—annual variation and causes*. There are no published records showing the average yield of chillies

per acre or their total production in different States, except in Madras. It is, therefore difficult to form an accurate estimate of the yield in different producing areas. It is all the more difficult in the absence of crop cutting experiments, as are conducted in case of staple crops. Estimates have had, therefore, to be drawn up after extensive enquiries from the producers and the State Agricultural Departments. Chillies are grown both as irrigated and dry crop (rainfed) and the yield in the former case is invariably higher than that of the latter. Table No. 9 below shows the average yield per acre of dried chillies in different States in India. Dried chillies are roughly 1/4th in weight of green chillies.

TABLE NO. 9

Table showing average yield per acre of dried chillies in different States in India

State	Irrigated	Unirrigated	Average yield for the whole crop
	Seers	Seers	Seers
1. Madras ..	754	328	—
2. Bombay ..	729	389	—
3. Madhya Pradesh ..	428	233	—
4. Bihar ..	—	—	681
5. Uttar Pradesh ..	—	—	340
6. Punjab ..	—	—	399
7. Assam ..	—	—	194
8. Orissa ..	—	—	321
9. Hyderabad ..	486	243	—
10. Mysore ..	729	365	—
11. Patiala and the East Punjab States Union ..	350	233	—

The yield varies considerably from State to State and from district to district in the same State. It depends upon several factors such as soil, time of sowing, climatic conditions, cultura operations, variety, irrigation facilities, rainfall, availability and use of manure and freedom from damage caused by pests and diseases. Cloudy weather during the flowering period, or frost when the crop is mature, affects it adversely. Droughty conditions also retard the growth of the crop and reduce the yield.

It will be observed that the average yield per acre of unirrigated crop is as low as 5 maund 33 seers in Madhya Pradesh and Patiala and the East Punjab States Union, while the highest out-turn is in the State of Bombay at 9 maunds 29 seers. In the case of irrigated crop also, there is a wide variaton in average yields, the lowest being in Patiala and the East Punjab States Union (8 maunds 30 seers) and the highest in the Madras

Rarhi

Varieties of chillies produced in the Bihar State

[Facing Page 14

PLATE No. 9.

Bihar

Motki

Varieties of chillies produced in the Bihar State

State (18 maunds 34 seers). It should be noted that these figures give only a rough indication of the average yields, since much lower and higher yields are also obtained in different areas. The maximum yield of over 24 maunds 22 seers per acre has often been recorded in Bihar, while under unfavourable conditions an acre may produce less than even 2 maunds 18 seers. The existing methods of collection of statistical data are far from satisfactory and the figures thus collected can at best be rough estimates. It is desirable, that regular harvesting experiments should be conducted all over India to find out the correct yield of chillies, as in the case of crops like wheat and rice.

(*c*) *Productions, annual variation and causes.*—Production depends primarily on the acreage under the crop each year. Normally an increase in the acreage results in increased production, but there are other factors also, which have a direct bearing on it. These are the soil, irrigation facilities, climatic conditions, variety and freedom or otherwise from insect pests and diseases, etc. If the conditions are favourable, there is an increase in the out-turn but if they are unfavourable, it is adversely affected.

A certain proportion of the chilli crop is utilised in green form all over the country. In most of the producing areas no particular fields are reserved for green chillies. The usual practice is to harvest green chillies according to demand, from the fields meant for producing the dry crop. Generally the first one or two pickings are harvested and sold in green form. Off-season chillies are also consumed mainly in green form. Round about the cities and towns, however, green chilllies are produced as a garden crop. In short, the position is that the chillies are produced mainly as a dry crop but a part is sold out in green form. At certain places, however, they are produced definitely with the object of being sold in green condition.

The quantity of chillies harvested and utilised in green form varies from tract to tract, depending upon the local usages and customs. In the Madras States, it is estimated that the quantity of chillies utilised in green form calculated on the basis of dry weight, is about 4 per cent of the total production of dry chillies. This is in addition to the output of dry chillies. In the Bombay State, on the other hand a part f the area under chillies estimated at 13.3 per cent is utilised for taking green chillies only In Madhya Pradesh about 31.5 per cent of the total production is harvested in the form of green chillies. In Bihar, green chillies are utilised to a lesser extent, and on the basis of dry weight, form an equivalent of 1 per cent only, of the total output of dry chillies. In Uttar Pradesh, chilli is a minor crop, and a major proportion of the area, *e. i.* 79 per cent is utilised for producing green chillies. In the Punjab, the position in regard to the production of green chillies is akin to that of Bihar, it being about 1.2 per cent of the total output of dry chilies. In Assam, a major proportion of the crop is disposed of in green form. In Orissa, it is estimated that 6.7 per cent of the total

chilli area utilised for raising green chillies. In West Bengal on the other hand, over 90 per cent of the total crop is utilised in green from. In the Hyderabad State, the crop so used is equivalent to 20 per cent in dry weight of the total dry crop. In the Mysore State, green chillies are harvested and utilised to the extent of 3.7 per cent in dry weight of the total dry crop.

Detailed statements of estimated out-turn of green and dry chillies in the main producing areas are given in Appendices No. III and IV respectively. The share of each State is illustrated in diagram facing this page and Table No. 10 below summarises the position:

TABLE NO. 10

Average production of chillies (green and dry):

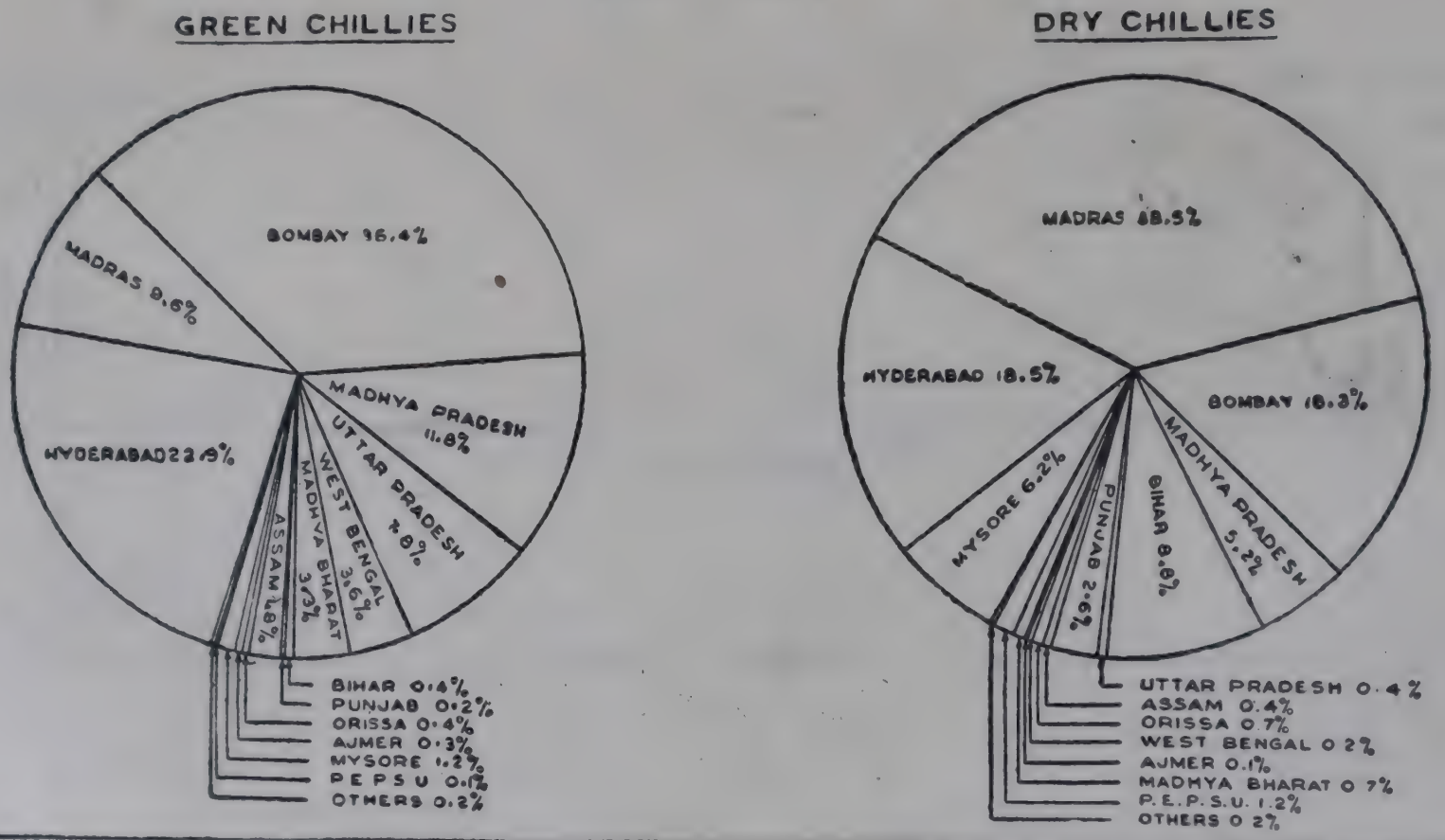
(1945-46 to 1949-50)

(In maunds of 82 2/7 lb.)

State	Green chillies		Dry chillies	
	Thousand maunds	Percentage of the total production	Thousand maunds	Percentage of the total production
Madras	763.6	9.6	3817.7	38.5
Bombay	2905.3	36.4	1617.3	16.3
Madhya Pradesh ..	946.5	11.8	514.5	5.1
Bihar	33.1	0.4	872.6	8.8
Uttar Pradesh ..	626.3	7.8	39.1	0.4
Punjab	14.0	0.2	254.5	2.6
Assam	143.1	1.8	41.5	0.4
Orissa	33.8	0.4	74.0	0.7
West Bengal ..	287.7	3.6	19.2	0.2
Hyderabad ..	1831.0	22.9	1831.0	18.5
Mysore	92.0	1.2	613.6	6.2
Madhya Bharat ..	265.5	3.3	70.8	0.7
PEPSU* ..	5.3	0.1	121.1	1.2
Ajmer	20.7	0.3	9.5	0.1
Others	19.5	0.2	19.5	0.2
Total: ..	7987.4	100.0	9915.9	100.0

*P.E.P.S.U.—Patiala and the East Punjab States Union.

SHARE OF IMPORTANT STATES IN THE ALL — INDIA PRODUCTION OF CHILLIES.



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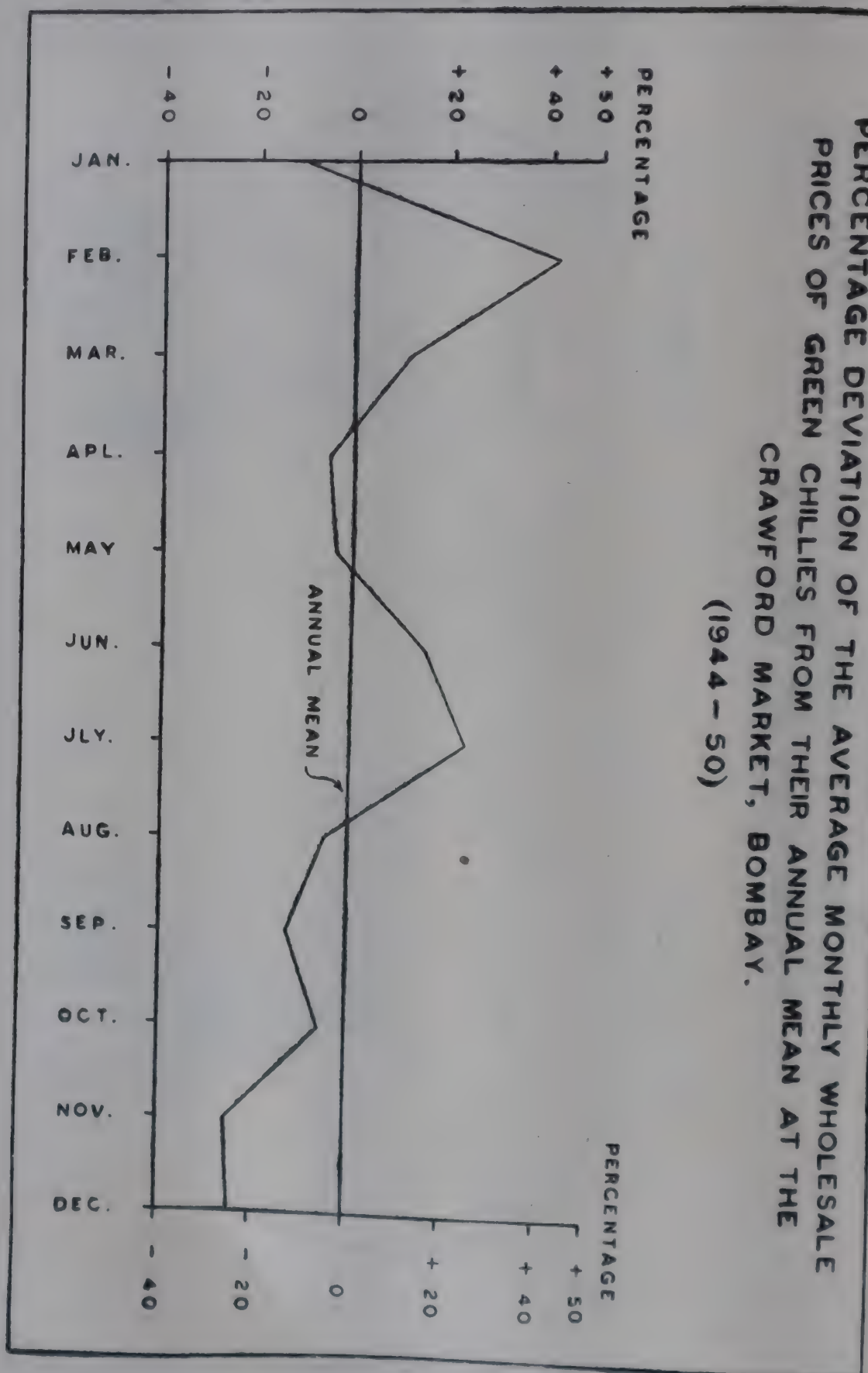

It will be observed that chillies are produced and consumed in green condition to the extent of over 7,987,400 maunds, while the total average production of dry chillies is estimated to be about 9,915,900 maunds. The dry weight of the total output of green chillies would be about 1,996,850 maunds, approximately. In other words, the consumption of green chillies in terms of dry weight is equal to just over 20 per cent that of the dry chillies. Bombay State produces and consumes the largest amount of green chillies followed by Hyderabad, Madhya Pradesh and Madras. These four together account for 80.7 per cent of the total production and consumption of green chillies. In other States, green chillies are produced only on a small scale.

Madras is the largest producer of dry chillies followed by Hyderabad and Bombay. These three States together account for 73.3 per cent of the total production of dry chillies. Bihar, Mysore and Madhya Pradesh account for another 20.2 per cent. The other states are not important from the point of view of production of chillies.

(*d*) *Seasons of harvesting and marketing.*—Seasonal variation in supplies of green and dry chillies.

(*i*) *Green chillies*: Green chillies are available throughout the year. The supplies, however are abundant when the normal harvesting period is on, but they are scarce during the hot weather. The peak period of supplies varies from place to place. In the Madras State, green chillies are harvested throughout the year as a readily marketable commodity. Since three crops of chillies are taken there, green chillies are available in sufficient quantities at all times but the supplies are heavy during the period, April to September. In the Bombay State, main season of marketing of green chillies is from October to March, though they are also available in varying quantities during the other months. In Madhya Pradesh green chillies are available in abundance from October to middle of March. Thereafter, the supplies are very poor upto July. During August-September, however, there is some improvement in arrivals.

In Bihar, supplies of green chillies are at their maximum during the period, December to February. There is, however, a regular, though limited, supply of green chillies produced as a vegetable garden crop, during the other months of the year, with the exception of summer months, when the supplies dwindle down to negligible proportions. In Uttar Pradesh, May and June are the months of lowest supplies of green chillies. They are available throughout the year, but the peak period is from November to February. In the Punjab, green chillies are available in large quantities from August to January. The supplies are on a reduced scale during the remaining months. Some vegetable gardeners in Panipat and Ferozepur districts ratoon their chilli crop and the produce in this case is available during April-May. It is not, however, a common practice as the yield is too low.

In Assam, in Surma valley, a major proportion of the green chillies is marketed from April to June, while in the Assam valley, the season lasts from November to February. In Khasi and Jaintia hills, main season of availability of green chillies is from July to January. For the State as a whole, supplies of green chillies are at their maximum, from November to January. In Orissa, green chillies are available throughout the year, in varying proportions, but the supply is plentiful during August-September and again in February-March. In West Bengal, main marketing season of green chillies extends from January to April. They are available during other months of the year also, but the supplies are scarce from September to December.

In the Hyderabad State also, green chillies are available throughout the year, but maximum supplies are received from December to May. Thereafter, the supplies are maintained from the garden crop, the produce of which starts coming in, from August onwards. In the Mysore State, the supply of green chillies is almost constant throughout the year. In Patiala and the East Punjab States Union, maximum supplies of green chillies are received from mid-August to mid-November. Small quantities, however, are available in the other months also.

(*ii*) *Dry Chillies*: Dry chillies are available almost all the year round, but the heaviest arrivals take place usually a fortnight or so after harvest. This time lag is necessary for drying the produce and preparing it for the market.

Madras: In the Madras State, chillies are transplanted at three different times, *viz.*, April-May, July-August and November-December. The April-May crop is harvested from August onwards, while the later two crops are harvested from December and April onwards respectively. Three to six pickings are necessary to harvest the whole crop. It takes about two weeks to get the chillies dried and prepared for the market. Thereafter, most of the produce is disposed of as soon as possible, to avoid prolonged storage. Since there are three crops, the produce is available almost all the year round, though supplies are at their maximum during the period, September to January.

Bombay: In the Bombay State, chillies are transplanted in June-July and the harvesting is done from October to January. Three to seven pickings are taken to complete the harvest in different parts of the State. Marketing of the produce commences in November and lasts till the end of April, the peak period being December to March. About 80 per cent of the produce is marketed during the months of November to March. The supplies decrease from April onwards reaching their lowest level in August. There is some improvement in September-October, when the old stock is cleared off, in expectation of the new crop in November.

Madhya Pradesh: In Madhya Pradesh, the harvesting of chillies starts in October and continues for 4 to 5 months. The

Uttar Pradesh & Punjab

Green chillies

Varieties of chillies produced in the Uttar Pradesh & Punjab States

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PLATE NO. 12.

Uttar Pradesh

Lakhimpur

Varieties of chillies produced in the Uttar Pradesh State

PLATE NO. 11.

Uttar Pradesh

Kashipuri

Varieties of chillies produced in the Uttar Pradesh State

PLATE NO. 13.

Uttar Pradesh

Ramnagar (Asli Kashipuri)

Varieties of chillies produced in the Uttar Pradesh State

produce is available all the year round, but the main marketing season is from November to March, when more than 64 per cent of the stock is disposed of. Another 25 per cent of the produce is marketed during the period April to June. The stocks are low from July to October.

Bihar: In Bihar, chillies are transplanted during the later part of September to mid-October and the harvesting lasts from December to March. The season of marketing closely follows harvesting. In January the produce of the new crop starts coming in, the peak period of arrivals being February-March. Then the arrivals decrease gradually coming almost to a standstill during the rainy season. After the rains, the market arrivals increase again and the stock is cleared off by December.

Uttar Pradesh: In Uttar Pradesh, the harvesting of chillies starts by the beginning of September and continues upto February. The produce is marketed throughout the year, but the supplies are at their peak during November and December. Business is, however, dull during the rainy weather.

Punjab: The harvesting season of chillies extends from mid-August to end of November in the northern districts, while in Karnal and Rohtak tracts it lasts from mid-September to mid-January. Generally 8 to 9 pickings are taken to complete the harvest. The marketing season closely follows harvesting but the bulk of the crop is marketed from October to January. It is estimated that more than 83 per cent of the produce is marketed during these four months.

Assam: The harvesting season of chillies varies widely in Assam. In Assam valley, harvesting lasts from November to March. In Surma valley it extends from June to mid-August. In Khasi and Jaintia hills the harvesting of chillies is done from May to December. As stated earlier, chillies come into the market shortly after harvesting. They are available in varying quantities, throughout the year but the main period of marketing is February-March.

Orissa: In Orissa, there are two crops of chillies. The first is sown from April to June and the second from September to November. The produce of the former is harvested during the months of August to October, while the latter crop comes in from February to April. Supplies, though available throughout the year, are at their maximum during the period, February to April.

West Bengal: In West Bengal, practically all the chillies produced in the state are consumed in fresh form. For dry chillies, the state is almost entirely dependent on imports from other States like Bihar and Assam.

Hyderabad: There are two chilli crops in the Hyderabad State *viz.*, *"Kharif"* and *"Rabi"*. Normally 3/5th of the total area under chillies is sown in the *"Kharif"* season while the

remaining 2|5th is sown in *"Rabi"* season. The harvesting of *"Kharif"* crop starts from December onwards. The *"Rabi,"* crop is harvested from March onwards. The marketing of the *"Kharif"* crops starts in January and of the *"Rabi,"* crop in April. The marketing season lasts from January to May, the heaviest arrivals being in the period, February to April. After the month of May, the market arrivals decrease gradually, becoming insignificant in the monsoon weather.

Mysore: The main marketing season of dry chillies in Mysore is from November-December to mid-March. Thereafter the arrivals are more or less stabilised.

Patiala and the East Punjab States Union: The produce of the new crop starts coming into the market by mid-August. The supplies increase gradually reaching their peak during October-November. As much as 78 per cent of the total produce is marketed from mid-October to mid-December. The supplies dwindle down in the following two months and the arrivals are insignificant, thereafter.

It will be observed from the foregoing discussion, that though dry chillies are available throughout the year, the peak period of supplies varies from State to State. In fact it varies from tract to tract, depending upon the time of sowing and harvesting. The months of June to August usually constitute the slack season, as the market arrivals are negligible during this period. It is mainly due to the fact, that chillies are easily susceptible to deterioration, if they come into contact with moisture, which is in excess during this period, on account of monsoons. Generally, it is seen to, that the stock is cleared off, before the arrival of the produce of the new crop, and as such, usually there is no carry-over.

(*e*) *Effect of natural conditions on the flow of supplies.*—The flow of supplies depends directly on the out-turn of the crop each year. There is an increased flow of supplies when a bumper crop is harvested, while in lean years the supplies are automatically decreased. The out-turn of the crop is dependent mainly upon the variety grown, type of soil, irrigation and manuring facilities, climatic conditions, etc.

Favourable climatic conditions are conducive to the production of a good crop, while unfavourable weather conditions cause severe losses. Drought during the growing stage retards the growth and affects the yield adversely. Rains and windstorms during the flowering period cause shedding of flowers and consequent reduced yield. Too much rain at any time is bad for chillies, as it produces water-logging conditions, which cause rotting of the chilli plants. Frost or severe cold at the time when the crop is mature, causes a considerable loss to the crop. Mite and leaf curl are common diseases of chillies, which cause extensive damage. Bright sun-shine and clear weather are necessary at the time of harvest to facilitate proper drying of

1st Row ... *Ferozepur, Nakli Patna, Lamba Phal and Chota Phal or Panipati*
2nd Row ... *Mianwal, Amritsari and Talwan or round*

Varieties of chillies produced in the Punjab State

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PLATE NO. 15.

Orissa

Dakhini

Dakhini (Cross section)

Suryamukhi

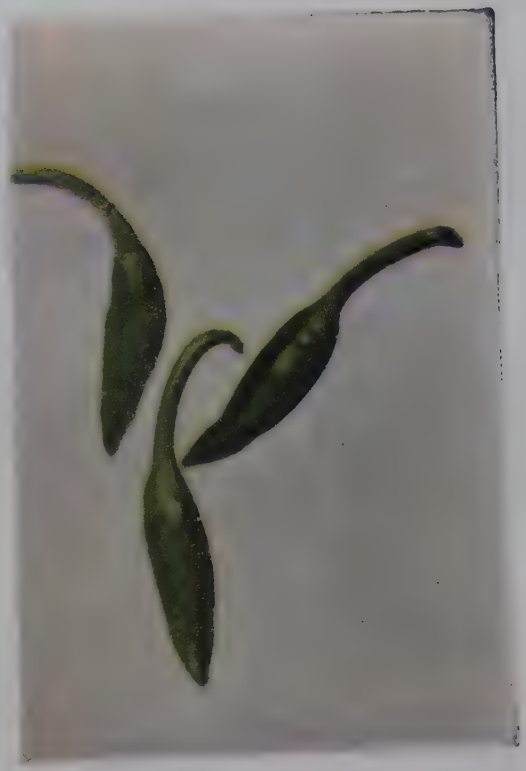
Suryamukhi (Cross section)

Varieties of chillies produced in the Orissa State

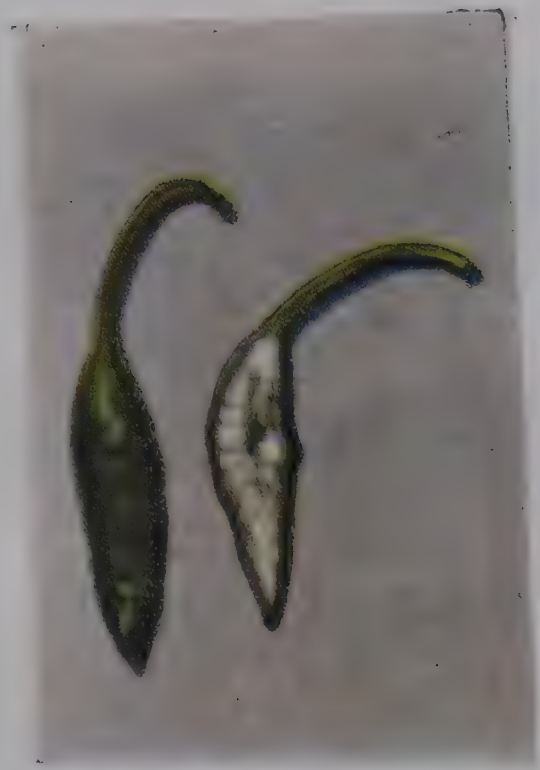
[Between Pages 20—21

PLATE NO. 17.

Orissa



Dhanua



Dhanua (Cross section)

Varieties of chillies produced in the Orissa State

chillies. Barring the factors mentioned above, the flow of supplies of chillies to the markets remains normal and depends upon the supply and demand position. During monsoons, however, when most of the roads are unfit for travel, the flow of supplies is considerably reduced. Another reason for the decreased flow, during monsoons is the fear of spoiling the produce, by exposure to sudden and unexpected rain during transit. Moreover, damp atmosphere causes deterioration in the keeping quality of the produce. To overcome these difficulties, the producers usually try to dispose of the produce before the monsoon sets in.

Green chillies are generally available in the markets almost throughout the year except in dry hot months, when the plants are unable to bear fruits. At such time, the produce from hills is in great demand.

(f) Quantity retained in the village by producers for domestic use and its proportion to the total output.—The quantity of chillies retained by the producers varies from region to region, depending on the local dietetic habits, distance of the producers' holdings from the market, transport facilities, prices, etc. Some quantity is retained for seed requirements by collecting the seed that drops during the drying process and handling. The seed requirements depend upon the variety of chillies, area to be sown and the method of sowing. It is also a practice amongst the producers to retain for this purpose, only inferior and deformed chillies, which are left on the plants after later pickings.

In the absence of any reliable statistics, it is possible to draw estimates only of the quantities of chillies retained by the producers. In the Madras State, it is estimated that 15 per cent of the total produce of both green and dry chillies is retained by the producers. In the Bombay State, it is estimated that only 1 per cent of green chillies and 6.25 per cent of dry chillies are so retained. In Madhya Pradesh, the retention is estimated to be 20 per cent in the case of green, as well as dry chillies. In Bihar, the retention is on a small scale being only 2.5 per cent for both, green and dry chillies. In Uttar Pradesh, neglible quantities of green chillies and only 2 per cent of dry chillies are retained by the producers. In the Punjab, the estimated retention of green chillies is 3.5 per cent, while that of dry chillies is 7 per cent. In Assam, the respective figures are 25 and 11 per cent. In Orissa also, the retention is very high, the estimates for green and dry chillies being 50 and 25 per cent respectively. In West Bengal, the respective estimates are 10 and 15 per cent. In the Hyderabad State, the producers retain about 16 per cent of the total production of both, green and dry chillies, while in the Mysore State the respective figures are 1 and 5 per cent only. In Patiala and the East Punjab States Union, 2 per cent of the total produce is estimated to be retained by the producers. (See Appendices No. V and VI for detailed information.)

It will be observed that out of the total estimated production of 7,987,400 maunds of green chillies, 719,900 maunds *viz.*, just over 9.0 per cent, are retained by the producers. The total production of dry chillies and their retention by the producers are estimated to be 9,915,900 maunds and 1,188,000 maunds respectively, the latter being over 11.9 per cent of the former.

(*g*) *Supplies avaliable for the market quantity and value*: The figures given in Table No. 11 below, based on extensive enquiries made during the course of this survey, indicate the estimated supplies available for the market, together with their value in the main chilli producing States. (See Appendices No. V and VI.)

TABLE NO. 11

Estimated supplies of chillies available for the market and their value (Average for the years 1945-46 to 1949-50)

State	Green chillies.		Dry chillies.	
	Quantity in maunds	Value in thousand rupees	Quantity in maunds	Value in thousand rupees
Madras	616,565	10,944	3,147,727	174,502
Bombay	2,847,496	48,941	1,501,033	83,401
Madhya Pradesh	700,438	11,645	391,052	24,783
Bihar	32,272	367	838,041	49,602
Uttar Pradesh	620,029	9,804	38,247	2,457
Punjab	12,961	172	230,774	12,866
Assam	105,745	3,410	35,985	2,715
Orissa	16,052	295	54,096	3,540
West Bengal	255,083	8,226	15,920	1,201
Hyderabad	1,384,226	34,865	1,399,606	68,581
Mysore	88,836	2,238	553,738	30,629
Madhya Bharat	240,676	4,001	53,808	341
PEPSU	5,201	59	115,695	6,530
Ajmer	18,442	166	7,238	326
Others	15,702	236	16,115	967
Total	6,959,724	135,369	8,399,075	462,441

It will be observed that the supplies available for the market are over 6,959,700 maunds, valued at Rs. 135,369,000 in the case of green chillies and 8,399,075 maunds valued at Rs. 462,441,000 in the case of dry chillies.

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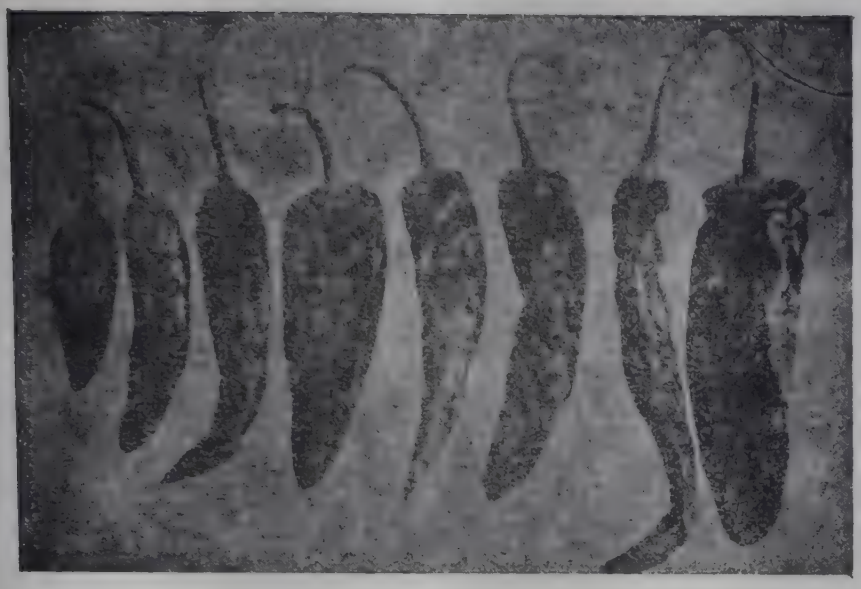
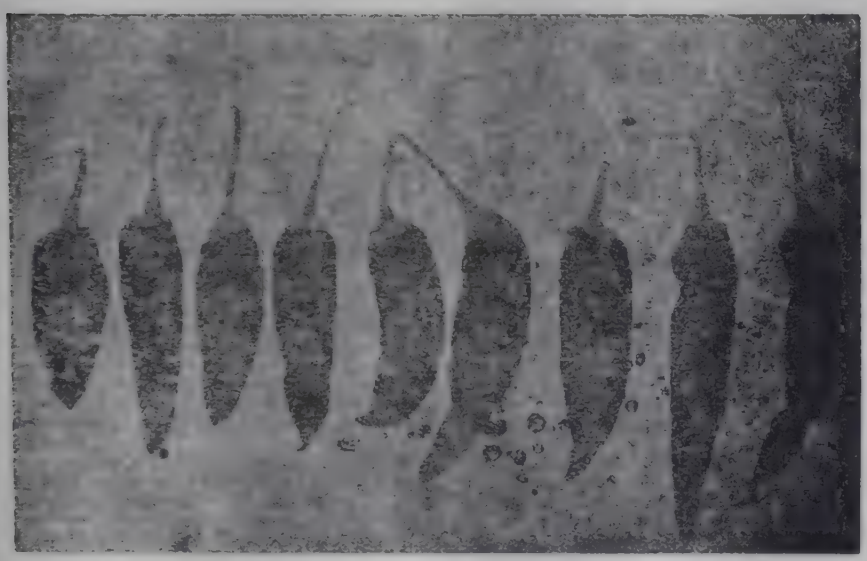
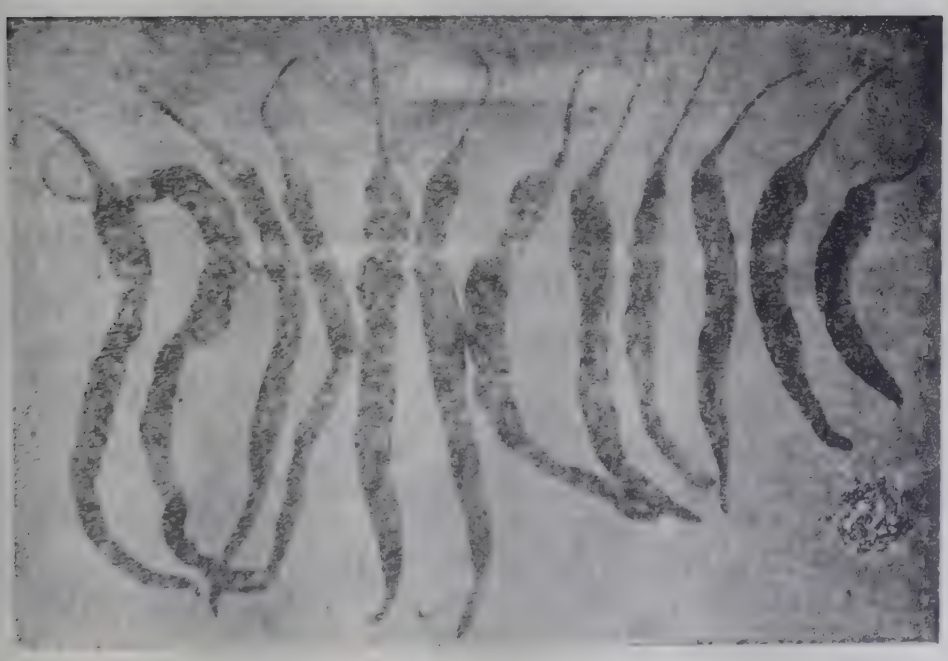
Plate No. 18



Mysore



Goribindnur



Javari
or
Tiptur

(3) Imports

India is self-sufficient in so far as chillies are concerned. Green chillies are neither imported into nor exported from India. Some quantities of dry chillies, however, are imported into the country now and then. The sources of imports into Madras are Burma, Straits Settlements and Ceylon. Small quantities of dry chillies are received in Bombay also from the same sources and countries like Aden and Dependencies, Arabia, Tanganyika, Australia and Kenya. Since the partition of the country, very small quantities have come into West Bengal from East Bengal (Pakistan) also. During the years 1941-42 and 1942-43, 9,703 maunds and 419 maunds respectively were imported into India. Ceylon accounted for 859 maunds and 417 maunds of these imports during the years 1941-42 and 1942-43 respectively. There were no imports of chillies into India during the years 1943-44 to 1945-46. 913 maunds and 4,241 maunds were imported in 1946-47 and 1947-48 respectively from Ceylon, etc. In the years, 1948-49 and 1949-50, 1,952 maunds and 587 maunds respectively were imported from East Pakistan. On the average, imports of dry chillies into India after partition of the country for the three years ending 1949-50 were about 2,250 maunds per year.

(4) Imports

Chillies could be exported freely up to July, 1942. It was observed in June, 1942, that exports were increasing abnormally causing local shortages and high prices. It was, therefore, decided by the Government of India in July, 1942 to restrict exports of chillies from India to 202,330 maunds per annum. These restrictions were withdrawn in November, 1945, after the cessation of hostilities, in consonance with the general policy to lift war-time controls, with a view to encourage India's export trade.

On fresh representations from the State Governments of Bombay and Madras, export of chillies was controlled again from June, 1946, onwards. Exports of chillies to Pakistan were allowed to be licensed freely from January, 1949. Maximum exports fixed for the years 1949, 1950, 1951 were 183,190; 233,139 and 186,457 maunds respectively. Quantities actually sent out, however, fell short of these targets.

(*i*) *Exports by sea: Quantities, value and destination.* The exports by sea of dry chillies from undivided India to foreign countries, ranged from 155,064 maunds to 273,981 maunds, during the years 1942-43 to 1946-47. (See Appendix No. VII.) Average annual exports during these five years were 204,758 maunds, valued at Rs. 6,668,030. Exports during the year 1947-48 were 243,165 maunds valued at Rs. 12,394,041. Average annual exports from India after partition, during the years 1948-49 to 1950-51 were 148,743 maunds, valued at Rs. 11,971,350. The main destination is Ceylon, which imported over 93 per cent of the total exports of chillies from India upto the year 1946-47. The share of Ceylon during the years 1948-49 to 1950-51

was 82.1 per cent of the total exports by sea. Small quantities are sent out to Aden and Dependencies, Mauritius, Australia, United Kingdom, Bahrein Islands, South Africa, Zanzibar and Pemba, Newzealand, Muskat, Trucial Oman, Pakistan, etc. Estimates show that 48.1 per cent of the total exports before partition of the country took place from Madras and 8.4 per cent from Bombay. Undivided Bengal accounted for 37.2 per cent, while the balance was exported from Sind. Details of the share in exports of different ports in the later years are not available, but it can be stated that Madras is the most important exporting port.

(*ii*) *Periodicity*: Appendix No. VIII shows the monthly exports of chillies from India during the years, 1942-43 to 1950-51. It will be observed that, on the average, exports are at their lowest ebb in September. The movements of exports after the year 1946-47, are not similar to those in the previous years. In fact, the exports vary from month to month in different years, depending upon demand. No particular months can be mentioned as constituting the period for heavy exports. During the pre-partition period, exports were at the highest level in June, but after the partition, maximum exports took place in the month of March.

(*iii*) *Trend—factors affecting*: Exports depend upon the yearly out-turn, stocks, prevailing prices at the exporting and importing ends, shipping facilities and charges. Table No. 12 below shows the trend of annual exports of dry chillies from India during the years 1941-42 to 1950-51.

TABLE NO. 12

Annual exports of dry chillies from India by sea
(*In maunds of 82 2|7 lb.*)

Year	Quantity.
1941-42	203,052
1942-43	273,981
1943-44	155,064
1944-45	164,424
1945-46	172,116
1946-47	258,205
1947-48	243,165
1948-49	136,419
1949-50	226,599
1950-51	83,212

It will be observed that there were fairly heavy exports in the years, 1941-42 and 1942-43. There was a sharp decrease in the following three years on account of restrictions on exports imposed by the State Governments. With the liberalisation of

exports and ever increasing prices, the exports shot up again in the year, 1946-47. There was a set-back in 1948-49, obviously due to after-effects of the partition of the country. Exports went up again in the year, 1949-50, but touched their lowest level in the following year. On the whole, no particular trend in the export of chillies is noticeable.

(*b*) *Exports by rail and road*: There were no exports of chillies from India by rail and road before the partition of the country in 1947. Since then, small quantities have been exported to Pakistan, both by rail and road. Average exports to West Pakistan from the Punjab are about 24,000 maunds. Exports to East Pakistan have ranged from 1,040 maunds in the year 1950-51 to 36,110 maunds in the preceding year. Average exports to East Pakistan, based on the figures for three years, from 1948-49 to 1950-51, are 13,800 maunds. So, in all about 37,800 maunds are exported annually to Pakistan, through land routes.

This shows that total average annual exports from India to foreign countries by sea and other routes based on the figures for the years 1948-49 to 1950-51, are about 186,550 maunds.

(5) RE-EXPORTS:

There are no re-exports of chillies from India.

(6) TOTAL AND NET AVAILABLE SUPPLIES:

The total and net available supplies of chillies, both in green and dry form, based on the average of five years ending 1949-50, are given below, in Table No. 13.

TABLE NO. 13

Total and net available supplies of chillies
(average for the 5 years ending 1949-50)
(In maunds of 82 2|3 lb.)

	Green chillies.	Dry chillies
Supply available for the market.	6,959,700	8,399,075
Imports	nil.	2,250*
Total supplies	6,959,700	8,401,325
less exports	nil.	186,550*
Net available supplies	6,959,700	8,214,775

It will be observed, that the estimated net available supplies in India, in the case of green and dry chillies are 6,959,700 maunds and 8,214,775 maunds respectively.

*Average for three years ending 1949-50. This has been one on account of the partition of the country.

CHAPTER II—DEMAND

GENERAL

Chilli, though introduced into India only three centuries back, has become one of the most important ingredients of Indian food. It is utilised in various forms. The dried fruit is most commonly used in all curries and other preparations after breaking it up into small pieces or converting it into powder. In fact consumption of chillies has become all but universal. In European countries, special sauces such as Tabasco and Paprika are manufactured from chillies. In India also, chilli sauce is prepared from the decoction of the chilli fruits in salt water or vinegar. The quantity produced, however, is insignificant. Green chillies are eaten raw with meals and are used for preparing raw *chutny*. They are also cooked fresh with special dishes and even used in place of dried chillies. Green chillies are very commonly pickled. Chillies are also used as an ingredient of medicines.

The consumers generally purchase dried whole chillies and convert them into powder at home by the simple process of grinding them with pestle and mortar. They avoid purchasing chilli powder from the market, since it is usually made from inferior, old stock, fallen seed and stalks, and is often adulterated with spurious colouring matter and other stuff. Green grocers also get small quantities similarly powdered for ready sale, the cost of powdering by manual labour being 4 to 6 annas per seer. There is, however, a regular demand from hotels and restaurants for the chilli powder. To meet this demand, chillies are got powdered in mills. These mills are not meant exclusively for rendering chillies into powder but are also used for powdering coriander seed, turmeric, cumin seed, etc. Usually thick skinned chillies with bright red colour, and less seed are preferred for producing good quality chilli powder, which is homogeneous and of fine texture. It is known as *'Barik'* in the trade circles. Medium quality of powder consists of seeds crushed from 1|4th to 1|8th of their size. This powder is coarser than the *"Barik"* quality and is known as *"Jadhi"*. The lowest quality is known as *Patri* and consists of half crushed seeds, stalks and colouring matter, etc. Milling charges vary from place to place. For instance, in the Bombay City the charges varied from Rs. 3-12-9 to Rs. 4-8-0 per standard maund in the year 1950, while at Surat they were only Rs. 2 per maund. At Poona, the charges range from Rs. 6 to Rs. 8 per maund. The cost of grinding in electric mills in the Hyderabad City varied from Rs. 5-0-4 to Rs. 5-11-5 per maund in the same year. Some factories in the Hyderabad City prepare chilli powder and sell it in packets of different size under their trade names. Roughly speaking, about 80 per cent of the chillies so powdered are consumed in hotels and about 15 per cent by poor classes of people. However, it is not possible to

estimate correctly the quantity of dry chillies actually converted into powder in the mills and, therefore, for the purpose of working out *per capita* consumption, chilli powder has been included in dry chillies.

(1) QUANTITATIVE

(a) *Quantities of local (green and dry) and imported produce consumed in different States.*—As stated earlier, there is a lamentable lack of statistics, and as such, it is extremely difficult to form a correct idea of the quantities of chillies utilised in different forms by the consumers. Inquiries made during the course of the survey reveal that dry chillies are almost wholly used as a spice in curries, foods, *chutnys* pickles, sauces and other such preparations. Green chillies, on the other hand, are put to various uses. They are very commonly eaten in raw condition. They are also used as an ingredient of raw *chutny*, as a spice, as a vegetable and for preparing pickle. In the absence of any reliable information, in regard to the quantities used for different purposes *per capita* consumption has been worked out, as a whole, for dry and green chillies.

The estimated production, as already stated, is about 7,987,400 maunds of green chillies, and 9,915,900 maunds of dry chillies. Imports into India are insignificant, while average exports are about 186,550 maunds of dry chillies. Losses and wastage are estimated to be 3.7 and 4.2 per cent in the case of dry and green chillies respectively. Seed requirements are about 119,786 maunds. Taking all these factors into account, average annual *per capita* consumption of chillies in different States, based on the average production, imports, exports, wastage, seed requirements, etc., during the years 1945-46 to 1949-50, is given below in Table No. 14.

TABLE NO. 14

Annual per capita consumption of green and dry chillies

(In seers)

State	Green chillies	Dry chillies.
Madras ..	0.5	2.6
Bombay ..	3.2	2.0
Madhya Pradesh ..	1.6	1.1
Bihar	Neg.	0.2
Uttar Pradesh ..	0.4	0.1
Punjab	Neg.	0.5
Assam ..	0.6	0.5
Orissa ..	0.1	0.3
West Bengal ..	0.5	0.3
Hyderabad ..	3.5	3.6
Mysore ..	0.4	2.5
Patiala and the East Punjab States Union ..	0.1	0.8
India ..	0.8	1.0

Neg.—Negligible

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It will be observed that the Hyderabad State has the highest *per capita* consumption of green chillies *viz.*, 3.5 seers followed by Bombay (3.2 seers) and Madhya Pradesh (1.6 seers). *Per capita* consumption in other States is less than a seer. In the case of dry chillies also, Hyderabad State has the highest *per capita* consumption *i.e.* 3.6 seers. Madras, Mysore and Bombay come next with 2.6 seers, 2.5 seers and 2 seers respectively. In Madhya Pradesh, *per capita* consumption is 1.1 seers. In the other States the *per capita* consumption of dry chillies is less than a seer. For India as a whole, *per capita* consumption works out at 0.8 seer and 1.0 seer in the case of green and dry chillies respectively.

It may be observed that the lower classes, as well as, the rural population are the main consumers of chillies. Upper and middle classes use chillies to a small extent only. Consumption of chillies in the urban areas is comparatively much less than in the rural areas. Another fact worth observing is that the South and South-western parts of the country are the biggest consumers of chillies.

(b) Quantities in demand for export: There is a standing demand for export of chillies produced in India. As stated earlier, average annual exports of dry chillies, during the years 1948-49 to 1950-51 were 186,550 maunds. Ceylon is the main importing country taking in about 90 per cent of our total exports. With the partition of the country an important chilli producing area *viz.*, East Bengal has gone to Pakistan and we will have to face competition from that country. To maintain our hold on foreign markets, we have to see that good quality produce is sent out at competitive prices.

(c) Trend and seasonal variations—causes : As stated earlier, chillies have become an important ingredient of the Indian food, but demand for them is more or less inelastic. As such, no particular trend is noticeable. Chillies are in demand all the year round. Green chillies are more in demand during the period, September to March, when they are available in abundance. Their supply diminishes in the plains during the summer and rainy seasons. The demand during this period is met by imports from the hills. The demand during this period, however, is not very heavy since the prices are high. In the case of dry chillies, the demand from the house holders is more or less steady throughout the year and they purchase their requirements every now and then. Generally speaking, however, supplies are in abundance during the winter and spring seasons and the demand from the trade is also the heaviest during this period. The wholesalers try to complete their purchases before the advent of rains. Arrivals fall off appreciably during the rainy season. The supplies and purchases increase from November onwards.

(2) QUALITATIVE

(*a*) *Varieties of local and imported produce in demand for local consumption and export :* The quality of chillies varies according to variety, the type of soil on which they are grown and the conditions under which they are cultivated. People living in different parts of the country have their own favourite varieties, and quite often the favourite of one tract does not find favour with the consumers in another tract. Usually the varieties of chillies produced in a particular area are given the first preference for local consumption. The demand also varies according to the purpose for which chillies are used. Generally speaking, however, pungency is the most important deciding factor, in the selection of the variety.

In the Madras State, different types of chillies are preferred for different purposes. For instance, in the Circars, pickling is common and for this purpose orange type chillies are preferred. For culinary purposes, long and medium type chillies are generally in demand all over the State. In Salem and Coimbatore districts, truncated type of chillies are favoured, as they occupy less packing space and being without stalks, give comparatively higher out-turn of chilli powder of good quality. Exports from the Madras State consist mainly of medium type chillies, with thin or thick skin and with or without calyx.

In the Bombay State also, the demand for varieties varies from tract to tract. Of the varieties grown round about Dondaicha and Nandurbar, long type chillies are more in demand for local consumption. In the Dharwar district, a mixture of *Adatar* and *Dabbi* varieties is commonly used. In the Sangli tract, *Deshi* (local) variety, which is of medium size, thin skinned and pungent is more popular, as compared with the other two varieties *viz., Sankeshwar* and *Lavangi* grown there. *Gaorani* variety of chillies is in great demand in East Khandesh. When supplies of the local produce run short, *Patna, Amravati* or *Waradi* and *Nizamabad* (*Sankeshwar* variety) chillies are imported. In the Belgaum district, *Sankeshwar* long type and medium type chillies, known to the trade as *Pachchapur* variety are in general demand. In the Poona district, there are several varieties available for sale, but the heaviest demand is for *Gaorani, Nandurbar, Sangli* and *Akkalkot* chillies. In the Surat market, locally produce *Lavangi, Deshi* (local) and *Dharwari* chillies command the best custom. Bombay City is one of the biggest consuming centres, and imports chillies from various producing areas in India. *Sankeshwar, Byadgi* (*Kaddi*), *Nandurbar* and *Dondaicha* chillies are the chief varieties imported from within the State. Consumers in the Bombay City prefer bright red and pungent *Sankeshwar* type chillies to dull red and less pungent varieties like *Byadgi* (*Kaddi*). Chillies imported from outside the State consist of *Indori, Patnai, Boria, Kathiawar*

and *Gati* varieties. Exports from the Bombay State consist mainly of *Kaddi, Dabbi* and *Adatar* varieties.

In Madhya Pradesh, chillies most in demand belong to the red type. Thin-skinned varieties are generally consumed locally, while thick-skinned varieties are preferred for export, as the latter sustain comparatively less damage in handling and transport. Imports are mostly from Bihar and consist of *Patna, Mukameh* and *Chandpur* chillies. Exports consist mainly of *Malkapur, Dhamangaon* and *Bhivapur* varieties. Yellow chillies are not exported, while *Dhobli* (large) chillies are utilised locally in green stage as a vegetable or in the preparation of *chutny*.

In Bihar, generally cheap and inferior types of chillies, and their mixtures known as, *Charki, Fatki* and *Chaiti* are used for local consumption. The chilli plants get partially revived through irrigation or rainfall after the main harvest and bear some small sized and inferior chillies. These are called *chaiti* chillies. Apart from the factor of cheapness, that influences the majority of consumers in the State in consuming inferior types of chillies, another reason is that chillies are mainly utilised by them in the form of paste for use in soups and curries, the only criterion being pungency and bitterness. Exports consist chiefly of the *Rarhi* variety to West Bengal and *Sitti* and *Mota* varieties to Uttar Pradesh, the Punjab, *etc.*

In Uttar Pradesh, pungent and glossy chillies are preferred to those, which are dull coloured and less pungent. *Desi* (indigenous) chillies having the largest area and production in the State are most widely consumed. Of the improved types, *Kashipuri* variety is in great demand. Local requirements are also met by imports from Patna (Bihar), Amritsar and Panipat (Punjab) and Patiala and Samana (Patiala and the East Punjab States Union). Exports from Uttar Pradesh consist mainly of *Kairana* chillies.

In the Punjab, generally pungent varieties of deep red colour are preferred by the consumers, as they impart a pleasing red colour to finished products like curries, etc. Moreover, the more pungent a variety, the smaller is the quantity required for seasoning curries, foods, etc. *Nakli Patna* is the most favourite variety followed by *Chhota Phal*. It may, however, be stated that local varieties produced in different tracts are generally preferred to all others, on account of economic reasons. *Kashmir* chillies, which are of bright red colour but less pungent are preferred by the educated and upper classes, who generally use small quantities of chillies.

In Assam, *Balijuri, Suryamukhi, Garo* and *Jaintiapuri* varieties of chillies are most popular from amongst the local varieties, while imports consist mainly of *Patnai, Keshabpuri* and *Contai* chillies. There are no exports of dry chillies from Assam.

In Orissa, *Dakhini* variety of chillies has the largest demand and is generally used after being dried. *Dhanua* variety is extremely pungent, and is used mainly as an ingredient of preparations like *Papars* and *Barri*. *Suryamukhi* and *Kangodia* varieties are mostly consumed in green form. Imports consist of red chillies from Madras and yellow chillies from Patiala (Patiala and the East Punjab States Union).

In the Hyderabad State, the varieties of chillies most commonly consumed are *Shivala, Ghati* and *Laungia*. Exports to the Bombay State consist of *Ghati* and *Shivala* varieties, while those to the Madras State are mainly of *Moti Mirch*.

In the Mysore State, *Goribidnur, Javari* and *Mysori* varieties of chillies produced within the State are most popular. Imports consist mainly of chillies from Madras and Bombay, while exports consist of *Goribidnur* and *Mysori* varieties of chillies.

In Patiala and the East Punjab States Union, *Sanauri* and *Samana* varieties are in great demand for local consumption. The former also finds a ready market in Uttar Pradesh and the Punjab.

It may be observed that a greater proportion of the requirements in different areas is met from local production. Imports depend upon easy accessibility and consist of varieties, which have established a reputation, in the consuming markets. Another point worth noting is that the consumption of chillies, in the producing areas, is confined mainly to inferior stuff, while good quality produce is exported to urban markets. The main factor is the pungency, and the producers do not bother about other factors such as colour, etc., and as such, they try to meet their requirements from the inferior produce.

(*b*) *Demand from different groups of consumers*: Chillies have become almost an essential article of diet of the rich and the poor alike. The only difference lies in the quantity and quality of chillies consumed by different classes. A major proportion of green chillies is consumed by the poor cultivators, peasants and labouring classes, who cannot usually afford curries and such other preparations. They generally eat their bread with salt, green chillies and onions. The main uses to which green chillies are put to, in the urban areas, are the preparation of pickle, 'raw *chutny*', vegetable salad and even along with dry chillies for flavouring curries, etc.

Dried chillies are more in demand in the urban areas as compared with the rural areas. In the latter, small, inferior and discoloured stuff is commonly consumed, the emphasis being on pungency rather than colour and size. For instance, aboriginals and poorer classes of Marathi speaking people in Madhya Pradesh prefer varieties like *Gaorani, Jamalgota, Kagadi* and *Yellow* chillies. On the other hand, middle classes and educated people demand milder varieties, with attractive red colour, like *Bhiva-*

puri and *Malkapur*. Generally speaking urban people prefer milder types of chillies, richly coloured with attractive appearance and from fresh stock, while the rural populace do not pay much attention to these factors. Powdered chillies are generally used in hotels and by the poorer classes of people. Chilli powder is usually made from inferior type of the produce, and as such, is not much in demand by the urban people.

CHAPTER III—PRICES

GENERAL

Adequate and authentic price statistics of chillies are not available. Hence the study of prices is rendered very difficult. Generally, no official records of prices of this commodity are maintained. In some States like the Punjab, wholesale and retail price statistics are maintained at the Tahsil headquarters. But the method of collecting the information is not at all satisfactory and the information collected is not reliable. At Ludhiana, for instance, the Tahsil records do not show any difference in prices from March, 1936 to March, 1946. In some other States like Madhya Pradesh and Orissa, the local Food and Supply Departments publish wholesale prices of chillies along with the other agricultural commodities, but they are found to differ from the actual market prices. In a few towns, where official retail prices are exhibited at the market places, they are usually at variance with the actual trade prices. Therefore, not much reliance can be placed on such records.

Growers seldom, if ever, keep any records of prices realised by them in different years. At best they can give a rough indication of the prices received by them for the previous crop. Similarly, the records of village merchants are not of much use. The commission agents and wholesale merchants maintain accounts of their business transactions but their records too are not dependable, in that the variety and quality of the produce are generally not mentioned. Sometimes, prices of the old and new stock are mixed up and quite often, there are gaps for several months in their price records. Another difficulty usually encountered is the unwillingness of the wholesalers to show their books. Hence, whatever information is available, is of a limited utility. A pre-requisite for comparison of prices is that the data should relate to the same quality of the produce and be available for fairly long periods. As it is not possible to ensure this, the best that can be done is to discuss prices, in a general way, with the help of the available data, for some of the most important producing and consuming areas of chillies.

(*a*) *Prices at producers' holdings—per maund of green and dry produce at harvest time—trend.*—As stated earlier, most of the producers do not maintain any records of the sales. Again, at most of the places, they do not sell the produce on the farms, but transport it to the nearest market for sale. As such, available information regarding prices of chillies at the producers' holdings is scanty. Therefore, the discussion that follows is based upon information collected from such areas only, where sales are effected on the producers' holdings. The supply of chillies is plentiful at the time of harvest which extends from 3 to 5 months and as such the prices are low during that period.

The common factors which affect the prices at any time are the variety and the quality of the produce; supply and demand; distance of the market from the producing areas; facilities for transport and storage and financial resources of the producer. If the producing area is near the market and adequate transport facilities are available, the cost of transport is negligible. Consequently the difference in the market and farm prices at such places is of small proportions. Incidently in such cases, the farmers are better informed about the market conditions and, therefore, in a better bargaining position. If the producer is not in immediate need of money and has storage facilities, he will naturally keep back his produce till a favourable price is forthcoming. Average harvest prices of dry and green chillies in the important producing States, wherever available, are discussed below. It is not possible to make a comparative study of green and dry chillies, because no statistics are available for the same variety and quality of chillies both in dry and green form. The units of weight and sale are different in different States. The price statistics have, therefore, been converted on standard maund basis, wherever necessary for facilitating comparison.

Madras.—Average seasonal harvest prices of dry chillies at Mallangurarоо village near Virudhunagar market and of green chillies at Palakanathur village in Madurai district, during the years, 1941 to 1950, are shown below in Table No. 15, based on Appendices No. IX and X.

TABLE NO. 15

Average harvest prices of chillies in the Madras State.
(Per standard maund of 82 2/7 lb.)

Year	Mallangurarоо (Dry chillies)	Palakanathur (Green chillies)
	Rs. A.	Rs. A.
1941	11- 0	5- 0
1942	18- 7	5- 2
1943	33- 9	6-12
1944	18- 9	10- 5
1945	30- 6	16- 0
1946	52-14	12-14
1947	58- 5	12- 8
1948	59-11	13-12
1949	78-12	20-12
1950	93- 1	24- 4

It will be observed that the average harvest prices of dry chillies moved constantly upwards except for a set-back in the year 1944. The rise in the year 1942 was mainly due to the entry of Japan into the world war in December, 1941, and the consequent all-round increase in prices. The upward movemen

received a set-back during the year 1944 due to a heavy crop and also on account of the ban on export of chillies enforced in the State that year. In the following year, however, the prices spurted up again, due to general inflation. The upward tendency was maintained in the following years and the highest level yet, was touched in 1950 @ Rs. 93-1-0 per maund. In short, the prices in 1950 increased by 746.0 per cent over those in 1941. In the case of green chillies, the prices rose from Rs. 5 per maund in the year 1941 to Rs. 24-4-0 per maund in the year 1950 *i.e.*, by 385.0 per cent. The prices declined to a certain extent from 1946 to 1948 but, thereafter, they have been increasing again in sympathy with the rise in prices of all commodities.

Bombay.—Average seasonal harvest prices of dry chillies at Byadgi and Sankeshwar, two important producing centres, during the years 1941 to 1950, are given below in Table No. 16 and shown in detail in Appendix No. XI.

TABLE NO. 16

Average harvest of dry chillies in the Bombay State

(Per standard maund of 82 2|7 lb.)

Year	Byadgi	Sankeshwar
	Rs. A.	Rs. A.
1941	6-10	10-12
1942	8- 4	12-0
1943	21-11	31-13
1944	19-14	30-10
1945	22- 6	33- 1
1946	41-10	48-15
1947	59- 6	64- 5
1948	42- 5	51- 8
1949	42-12	60- 2
1950	45- 3	62- 6

Sankeshwar chillies being of superior quality and in greater demand in consuming centres like Bombay and Poona, fetch higher prices. Byadgi chillies are cheaper partly due to their dull red colour and also because of larger local production. It will be observed that in the year 1942, prices moved up slightly, but the following year, they recorded a steep rise. There was a slight fall in 1944, on account of transport restrictions. They started rising again in 1945, and attained the highest level in 1947. At Byadgi, the prices receded after 1948. At Sankeshwar, however, after a recession in 1948, they moved up again. The prices in 1950 were 582 and 480 per cent higher than in the year 1941 at Byadgi and Sankeshwar respectively. The full impact of the last world war was felt only after the entry of Japan into the war. The prices increased as the war drew nearer to India's boundary and since then have gone up in sympathy with the general inflationary tendencies in the country.

Madhya Pradesh.—Average harvest prices of dry and green chillies on the producers' holdings in Malkapur Taluk, an impor-

tant chilli producing area in Madhya Pradesh, during the years, 1941-42 to 1950-51, are given below in Table No. 17.

TABLE NO. 17

Average harvest prices of chillies at Malkapur in Madhya Pradesh
(Per standard maund of 82 2/7 lb.)

Year	Dry chillies	Green chillies
	Rs. A.	Rs. A.
1941-42	8-12	2- 8
1942-43	10-12	3- 1
1943-44	14- 0	4- 0
1944-45	17- 8	5- 0
1945-46	23- 5	6-11
1946-47	25- 8	7- 4
1947-48	34- 1	8- 8
1948-49	58-14	14-15
1949-50	71- 4	17-12
1950-51	66- 0	16-14

The prices rose steadily from year to year, showing a phenomenal rise of Rs. 57-4-0 per maund, in the case of dry chillies in the year, 1950-51 over the prices obtained in the year 1941-42. In other words, the prices of dry chillies rose by 654.3 per cent during the years 1941-42 to 1950-51. There was a similar rise in the case of green chillies, it being 575.0 per cent over the prices quoted during the year, 1941-42. The rise was in sympathy with the general increase in prices, since the year 1941-42. The highest prices were recorded in the year, 1949-50.

Bihar.—Average harvest prices of dry and green chillies on the producers' holdings at Pusa Road and Dalsing Sarai, during the years, 1942-43 to 1949-50, are given in Appendices No. XII and XIII and summarised below in Table No. 18.

TABLE NO. 18

Average harvest prices of chillies in Bihar
(Per standard maund of 82 2/7 lb.)

Year	Pusa Road		Dalsing Sarai	
	Dry chillies	Green chillies	Dry chillies	Green chillies
Rs. A.	Rs. A.	Rs. A.	Rs. A.	Rs A
1942-43	16- 5	3- 8	16- 5	3-11
1943-44	18- 9	3-15	16-14	3-13
1944-45	14- 0	2-13	15- 0	3- 6
1945-46	34- 5	7-10	34- 4	7- 8
1946-47	38- 8	8-12	38-12	8- 8
1947-48	35- 8	9- 8	34- 2	9-12
1948-49	40- 4	10- 4	43-12	11- 4
1949-50	77-4	21- 2	75-12	19-12

It will be observed, that the prices rose steadily from the years 1942-43 onwards, except for a slight set-back during the year, 1944-45, which was due to a bumper crop harvested that year. The price level was almost the same at both the producing centres. The prices of dry chillies increased from 16-5-0 per maund in 1942-43 to Rs. 77-4-0 per maund in 1949-50 at Pusa Road *viz.*, by about 379.6 per cent and at Dalsing Sarai by 364.4 per cent. In the case of green chillies the rise was 503.6 and 435.6 per cent at Pusa Road and Dalsing Sarai respectively, during the same period.

Uttar Pradesh.—Average harvest prices of dry and green chillies at Kairana market in the Muzaffarnagar district, during the years 1942-43 to 1950-51, are given below in Table No. 19.

TABLE NO. 19.

Average harvest prices of chillies at Kairana in Uttar Pradesh
(Per standard maund of 82 2|7 lb.)

Year	Dry chillies	Green chillies
	Rs. A	Rs. A.
1942-43	32- 2	11-11
1943-44	39- 5	12-11
1944-45	42-14	15- 0
1945-46	50- 0	16-10
1946-47	51- 7	17- 8
1947-48	53-3	13- 5
1948-49	58- 0	16- 8
1949-50	66- 1	18-10
1950-51	71- 8	18- 6

The harvest prices at Kairana, which are a fair example of prices in Uttar Pradesh, show the same trend as in other States *viz.*, a steady advance. Prices of dry chillies rose by 122.6 per cent while those of green chillies by 57.2 per cent, during the years 1942-43 to 1950-51.

Punjab.—In the Punjab, the producers generally carry the produce to the market after harvesting it and sell it there. The harvest prices have been worked out after deducting transport charges, etc. Table No. 20 below gives the calculated average price of green chillies realised by the farmers on their farms at a few important growing centres in the Punjab, during the harvesting period, in the years 1942-43 to 1949-50.

TABLE NO. 20

Average harvest prices of green chillies in the Punjab
(Per standard maund of 82 2|7 lb.)

Producing centres.	1942-43	1943-44	1944-45	1945-46	1946-47	1947-1948	1948-49	1949-50
	Rs. A.	Rs. A.	Rs. A.	Rs. A.	Rs. A.	Rs. A.	Rs. A.	Rs. A.
Fazilka	4-14	5-13	4-13	7- 9	13- 3	9- 6	16- 6	13-12
Panipat	4-13	4-11	4- 7	6-14	11- 5	9-11	13-12	13-12
Gharunda	N.a.	4- 5	4- 4	7- 9	10- 9	5- 9	N.a.	N.a.
Murthal	N.a.	N.a.	5- 7	8-15	12- 7	8- 6	N.a.	N.a.

N.a.—Not available

It will be observed, that on the whole there was a general rise in prices throughout the period except for a set-back in the years, 1944-45 and 1947-48. The decline in 1944-45 was due to general restrictions on the transport of chillies and in 1947-48 due to partition of the Punjab and the consequent abnormal conditions. Prices at Murthal are comparatively high because of its nearness to Delhi, an important consuming and redistributing centre. Similarly prices at Fazilka are generally higher than at Panipat and Gharunda, because the former is the source of supply to Bikaner in Rajasthan. Prices at Panipat and Gharunda rule at a lower level as they are situated at a greater distance from the main consuming markets. The prices at Fazilka rose by 182.1 per cent during the years, 1942-43 to 1949-50. They were even higher in the year 1948-49. Prices at the other centres also increased in sympathy with the general rise in prices.

Orissa.—Average harvest prices of dry and green chillies in Berhampur and Cuttack markets respectively, during the years, 1940-41 to 1949-50, are given below in Table No. 21.

TABLE NO. 21.

Average harvest prices of chillies in Orissa
(Per standard maund of 82 2|7 lb.)

Year	Dry chillies	Green chillies
	Rs. A.	Rs. A.
1940-41	9- 0	2-10
1941-42	9- 0	2-13
1942-43	11- 4	3-12
1943-44	30- 0	7- 8
1944-45	33-12	7- 8
1945-46	37- 8	9- 6
1946-47	39-12	9-14
1947-48	30- 4	19-13
1948-49	47- 0	22- 1
1949-50	97- 4	27-15

It will be observed that the prices remained steady during the year 1940-41 and 1941-42. Thereafter, they started moving in sympathy with the general rise in prices. The prices of dry chillies jumped from Rs. 11-4-0 per standard maund in the year 1942-43 to Rs. 30 per standard maund in the following year. The upward trend was maintained in the following years except for a temporary set-back in 1947-48. The prices of dry chillies increased by about 980.6 per cent during the period, 1940-41 to 1949-50. The increase in the prices of green chillies was equally marked, the prices during the year 1949-50 being about 964.3 per cent higher than those in 1940-41.

Patiala and the East Punjab States Unions.—Average farm prices of dry and fresh chillies at Patiala, in Patiala and the East Punjab States Union, during the years, 1940-41 to 1949-50, are given below in Table No. 22.

TABLE NO. 22.

Average harvest prices of chillies at Patiala
(Per standard maund of 82 2/7 lb.)

Year	Dry chillies	Green chillies
	Rs. A.	Rs. A.
1940-41	9- 8	2-14
1941-42	11- 0	3- 4
1942-43	14- 0	5- 0
1943-44	24- 0	7- 0
1944-45	30- 8	8- 8
1945-46	40- 0	12- 8
1946-47	45- 0	17- 0
1947-48	53- 8	7- 3
1948-49	57- 5	8-12
1949-50	86- 7	11-7

The harvest prices of dry chillies at Patiala followed the same trend as in the other States. They increased continuously, so much so that in the case of dry chillies they were about 809.9 per cent higher in the year 1949-50, as compared with the prices in 1940-41. The prices of green chillies declined sharply in 1947-48, but have been rising again since then. As mentioned earlier, the abnormal rise in the prices of chillies was in accord with the general rise in prices of all commodities.

As stated previously, the sale of chillies on the producers' holdings is not common, the usual practice being to transport the produce to the nearest market for sale. The harvest price movements were more or less normal up to the year 1941-42, depending upon the usual factors like supply, demand, transport facilities, etc. Thereafter, however, a steep rise was recorded all over the country and the prices have maintained a high level since then on account of the general inflation.

(*b*) *Wholesale prices.*—The task of presenting a satisfactory analysis of wholesale prices is exceedingly difficult in view of the difficulties already expressed in the preceding pages *viz.*, lack of dependable data and information regarding quality and variety of the produce. The records of the commission agents and wholesale merchants, from which the information on prices has been extracted, seldom give any indication regarding the quality, variety, etc., of the produce. Therefore, prices can be discussed only in a general way.

Wholesale prices of chillies, as of other agricultural produce vary to a considerable extent from time to time depending upon the supply and demand of particular varieties, time and period of availability, the period of storage, weather conditions, transport facilities and charges, etc. In the discussion that follows, a general idea of the wholesale prices, their seasonal variations and trend have been given.

(*i*) *Comparison of prices of different varieties* : As already stated, stated, very little information is available in regard to prices of different varieties, at the same time and in the same market. A few instances based on the available information, however, are discussed below :

Madhya Pradesh: Table No. 23 below, shows the average monthly wholesale prices of some varieties of dry chillies at Nagpur, in Madhya Pradesh, during the year 1951.

TABLE NO. 23

Average monthly wholesale prices of dry chillies at Nagpur, during the year 1951

(Per standard maund of 82 2/7 lb.)

Months	VARIETY			
	Kathiawar	Punjab	Bhiwapur	Mokameh
	Rs. A.	Rs. A.	Rs. A.	Rs. A.
January	62-7	76-11	74-1	Na.
February	61-1	73-0	72-10	87-8
March	59-11	68-5	71-9	Na.
April	57-1	70-5	73-15	Na.
May	60-3	78-6	78-14	Na.
June	55-5	76-8	73-2	87-8
July	55-4	76-11	73-1	85-15
August	42-5	65-3	64-5	74-6
September	36-5	63-0	61-15	82-5
October	38-8	59-10	63-10	77-2
November	33-14	53-5	55-15	65-7
December	29-13	48-4	51-11	59-15
Average	49-5	67-7	67-14	77-8

Na—Not available

It will be observed that Kathiawar chillies fetch the lowest prices, as they are considered inferior to the other varieties. The prices of the Punjab and Bhiwapur chillies move more or less, at the same level. Sometimes, the prices of the Punjab chillies are higher while at others, Bhiwapur chillies are quoted at higher rates. This is mainly due to the supply position of the two varieties, at different times. Mokameh *i.e.*, chillies imported from Bihar are of superior quality and fetch the highest prices.

Uttar Pradesh: Average monthly wholesale prices of dry *Kashipuri*, *Patna* and *Samana* (Patiala) chillies at Lucknow are given in Appendix No. XV and summarised below in Table No. 24.

TABLE NO. 24

Average monthly wholesale prices of different varieties of dry chillies at Lucknow, during the years 1946-50

(Per standard maund of 82 2/7 lb.)

Months	VARIETY		
	Kashipuri (U.P.)	Patna	Samana (Patiala)
	Rs. A.	Rs. A.	Rs. A.
January	64-6	67-10	63-10
February	66-0	63-6	61-13
March	66-3	60-0	60-6
April	65-6	60-6	59-10
May	66-10	62-6	61-6
June	67-0	62-10	60-10
July	65-10	64-0	61-3
August	65-3	65-3	61-0
September	63-0	65-13	62-3
October	61-13	67-13	62-13
November	58-13	69-6	63-13
December	63-3	69-10	64-13
Average	64-7	64-14	61-15

It will be observed that there is not much variation in the average prices of different varieties. However, the price level of *Kashipuri* variety is high from February to July as compared with *Patna* variety, while from September to January, the latter fetches higher prices as compared with the former. This is mainly due to the availability of the two varieties at different times. *Kashipuri* chillies are the produce of Uttar Pradesh, while the other varieties are imported from Bihar and Patiala and the East Punjab States Union. *Kashipuri* chillies, however, are in great demand and are preferred to the other varieties. The prices of

Patiala chillies are comparatively low, as the other two varieties are considered to be superior.

Hyderabad State.—Raichur is an important consuming market of chillies in the Hyderabad State and imports chillies from different areas of production. Appendix No. XVI shows the average monthly wholesale prices of *Jowari, Warangal* and *Dharmabadi* varieties of dry chillies at Raichur, during the years 1946-50. They are summarised below, in table No. 25.

TABLE NO. 25

Average monthly wholesale prices of different varieties of dry chillies at Raichur, during the years 1946-50

(Per standard maund of 82 2/7 lb.)

Months	VARIETY		
	Jowari	Warangal	Dharmabadi
	Rs. A.	Rs. A	Rs. A.
January	38-12	38- 9	40- 1
February	42- 5	42- 3	44- 3
March	45- 1	45-14	46- 6
April	36- 1	44- 0	47-13
May	49-13	45- 4	52-14
June	50-11	47- 6	51- 9
July	54-14	54- 6	57-14
August	55-12	53-14	58- 7
September	54- 0	53- 5	54- 6
October	49- 7	50-15	51-14
November	47-11	48- 8	48- 9
December	50-12	47- 1	47-14
Average	48-12	47-10	50- 3

It will be observed that, the prices of *Dharmabadi* variety are the highest followed by *Jowari* and *Warangal* respectively. *Dharmabadi* variety gets a good market both inside the state as well as, outside it. *Jowari,* variety is considered to be slightly superior to the *Warangal* variety.

It may be pointed out that people in particular areas have a preference for particular varieties, and as such, a variety which is sold at a high price in one place may not command the same level of prices in another place.

(*c*) *Seasonal variation in wholesale prices of green and dry chillies in some important markets.*

(*i*) *Green chillies.*—Green chillies are available almost all the year round in varying quantities. They are in short supply however, during the summer months. The prices naturally

depend upon supply and demand and other factors already mentioned in the preceding section. They are usually low when the supplies are available in a sufficient quantity. The price fluctuations in the case of green chillies are sharp as compared with those of dry chillies, because the arrivals of the former are uncertain from day to day and there are no stocks to fall back upon. Weather conditions play a very important part in the arrivals of green chillies to the markets and consequently affect the prices considerably. Adequate price data are not available in the case of green chillies but a few examples will amply serve to prove the observations made above. Seasonal variations in the prices of green chillies at some of the important markets are discussed below :

Bombay.—Bombay City is the most important consuming market in the Bombay State and the price fluctuations of green chillies in this market give a fair indication of the price movements in the State as a whole. The diagram facing page 17 shows the percentage deviation of average monthly wholesale prices of green chillies from their annual mean, during the years 1944-59, at the Crawford market, Bombay. (See Appendix No. XVII). Green chillies start coming in quantity into the market from August-September onwards, the arrivals being heavy in November and December. The arrivals decrease in January, February and March. During April and May, the position improves on account of imports from Panval and Shivgaon. The arrivals in June and July are negligible on account of the rains. The average prices are at their lowest level in November, at 25.2 per cent below the annual mean. They improve in January to the level of 11.4 per cent below the annual mean but shoot up to 42.0 per cent above it in February, the month of highest prices. In March, they come down to 11.5 per cent above the mean, followed by a further drop of 16.3 per cent in April. There is a slight upward move in May which is accelerated in June and July, the price level in the latter month being 24.2 per cent above the annual mean. Thereafter the prices start moving downward rapidly and reach their lowest level in November after an upward spurt in October. The extreme range of price variation is thus equal to 67.2 per cent or Rs. 11-9-0 per maund. The maximum and minimum average wholesale prices during the period under review were Rs. 24-7-0 and Rs. 12-14-0 per maund respectively.

Madhya Pradesh.—The diagram facing page 44 shows the percentage deviation of average monthly wholesale prices of green chillies from their annual mean, during the years, 1946-50, at Nagpur. (See Appendix No. XVIII). As in the case of Bombay, the fluctuations in prices at Nagpur are very sharp. The new produce starts coming into the market in July-August and the supplies continue till March. Thereafter the green chillies are scarce. The prices start moving down sharply in July-August and touch their lowest level at 45.4 per cent below the annual mean in October-November.

They remain at a low level till February, when they stand at 32.3 per cent below the annual mean. The prices move up by 23.4 per cent in March. There is a sharp upward spurt in prices in April, while in May they sky-rocket reaching the level of 123.5 per cent above the annual mean. There is a recession of 39.5 per cent in June, the price level being 84.0 per cent above the annual mean. Thus the extreme range of variation is 168.9 per cent. The highest and lowest average prices during the years, 1946-50, were Rs. 37-2-0 and Rs. 9-1-0 per maund respectively.

Uttar Pradesh.—In Uttar Pradesh, green chillies start coming into the market from October onwards. The market arrivals increase appreciably in October-November, while the months of December to February constitute the peak period of supplies. Thereafter, there is a steady decrease in supplies. The diagram facing page 45 shows the percentage deviation of average monthly wholesale prices of green chillies from their annual mean, during the years, 1949 and 1950 at Lucknow. (See Appendix No. XIX). The prices touch their lowest level in December at 52.3 per cent below the annual mean, the average price in that month being Rs. 10 per maund. They improve by 7.2 per cent in January and the upward movement continues steadily till June, when the highest level is touched at 74.2 per cent above the annual mean, the average price in that month being Rs. 36-8-0 per maund. Thus the total range of variation is 126.5 per cent or Rs. 26-8-0 per maund. The prices move down rapidly from July onwards till December.

West Bengal.—In West Bengal, green chillies are freely available from January to June and the supplies are at their lowest level from September to November. The diagram facing page 46 shows the percentage deviation of average monthly wholesale prices of green chillies from their annual mean, during the years 1946-50, at Calcutta. (See Appendix No. XX). The prices are at peak level in September and at their lowest in January. After reaching their maximum in September at 24.1 per cent above the annual mean, the prices move down to 4.8 per cent below the mean in December and drop further to their lowest level at 22.8 per cent below the mean in January. There is an upward spurt in February-March followed by a recession in April. The prices move down to 18.4 per cent below the mean in June after a slight recovery in May. Thereafter, they start going up and rise continuously till they touch their highest level in September. In short the price movements of green chillies are irregular at Calcutta, it being purely a consuming market. The extreme range of variation is 46.9 per cent, which in terms of money is equal to Rs. 15-2-0 per maund, the highest and lowest average prices being Rs. 40 and Rs. 24-14-0 per maund respectively.

Generally speaking it may be said that the prices of green chillies are low during winter months and high during the summer months.

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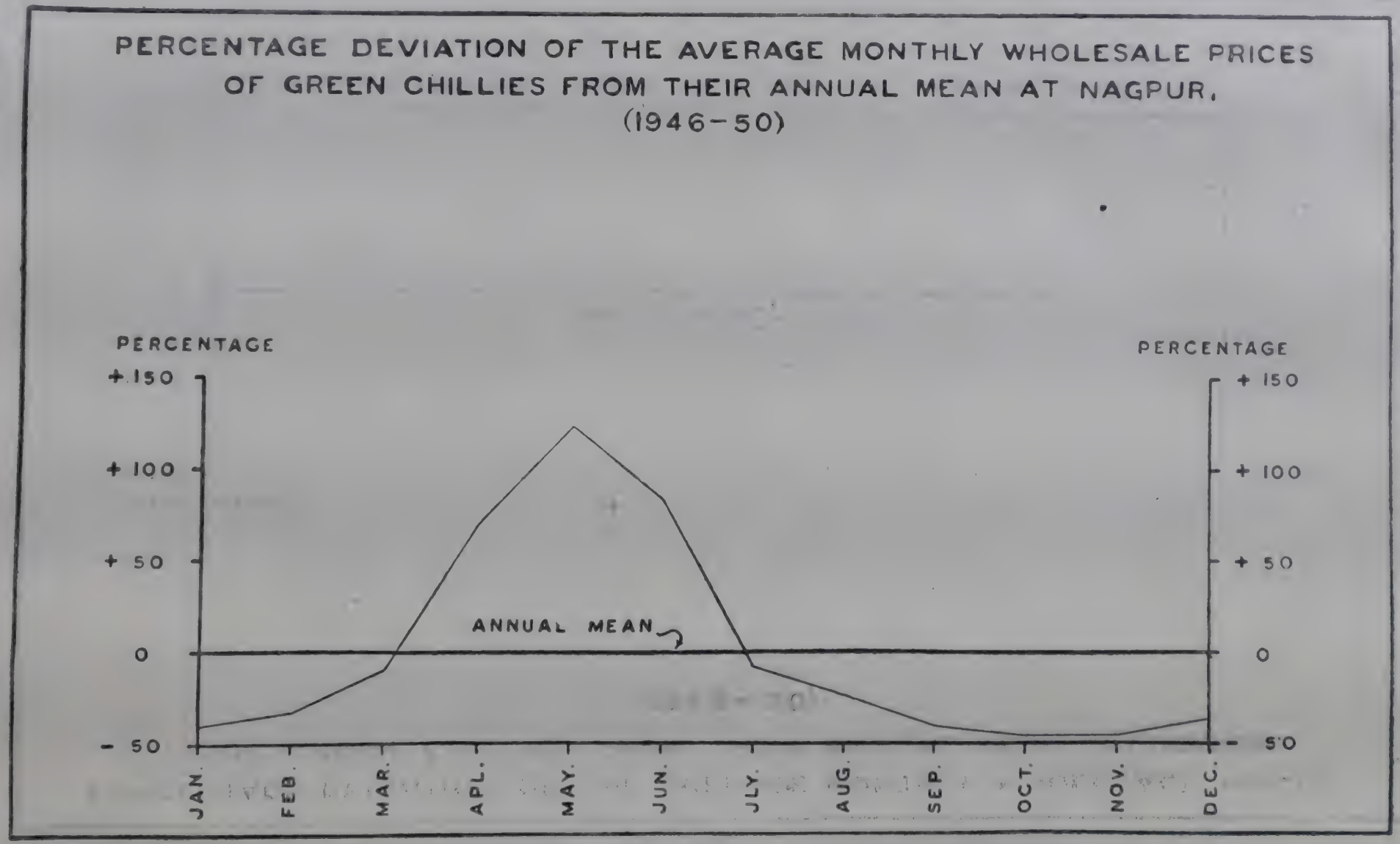

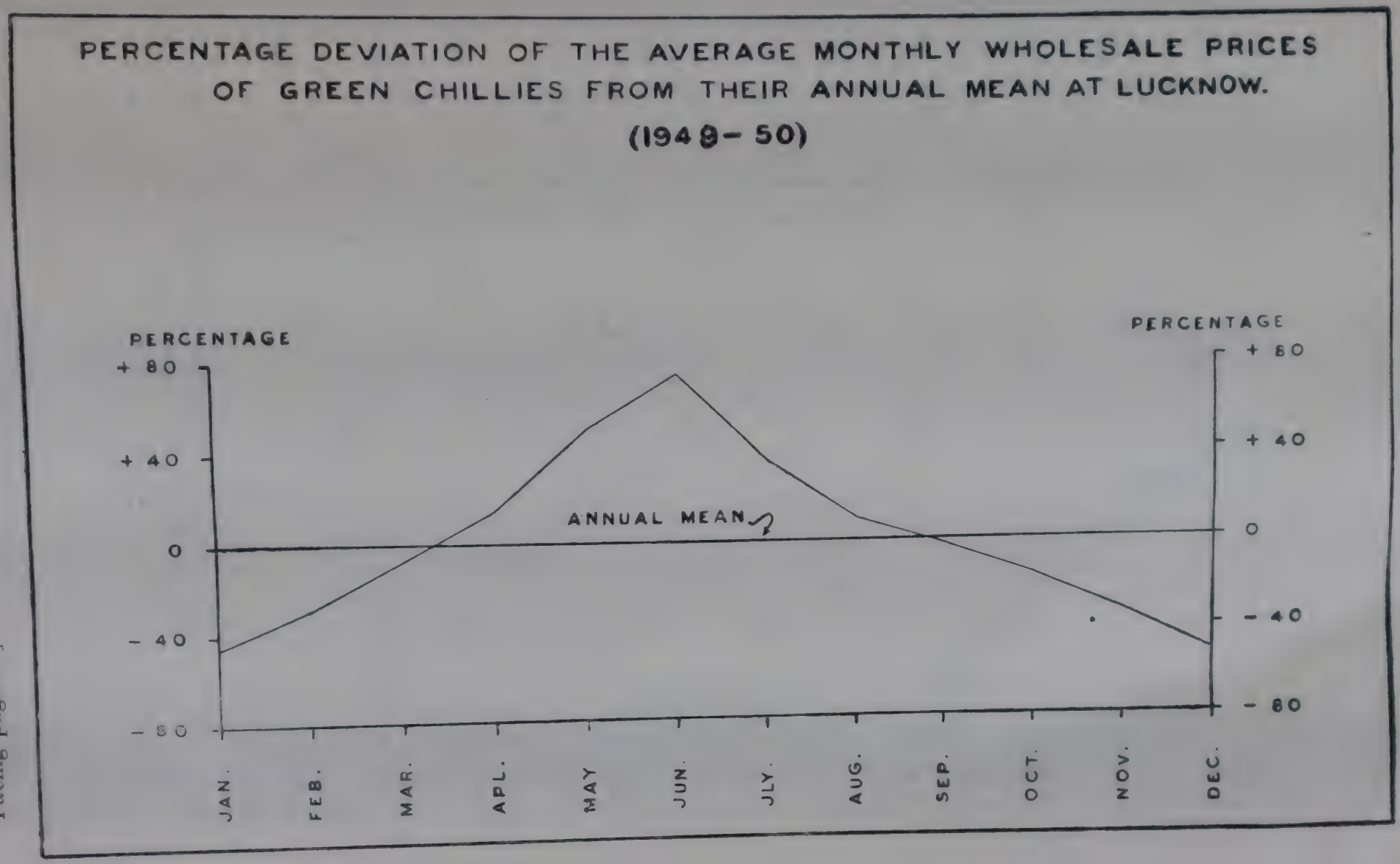

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(*ii*) *Dry chillies.*—The prices of dry chillies vary from time to time and the causes, which have been mentioned in the preceding sections, as affecting wholsale prices, have a direct bearing on the seasonal variations also. In addition to other factors such as the prevailing weather conditions, supply and demand, the arrival of fresh stock in large quantities at the same time, also affects the normal movement of the prices. This is especially so in the importing markets where generally the fluctuations in prices are irregular. Generally speaking, the prices should be high at the commencement of the season, declining gradually as the supplies increase and increasing again with the decrease of supplies. But the movements of prices of dry chillies during the past few years have not been along the normal lines for the reason that the conditions since 1942, have been anything but normal. The entry of Japan into the the last world war caused an upset in the price structure and ever since then the prices have moved irregularly. The general movement has been towards a constant rise irrespective of the arrival of the produce of the new crop and consequent increase in supplies. Another cause of irregularity in price movements has been the transport bottle-neck. Sometimes no fresh stock has come into the market in spite of the new harvest, while at other times excessive supplies have been dumped into different markets. Such factors have resulted in upsetting the normal movements of prices. Another factor of importance is that while the produce is sold simply as dry chillies, it usually consists of different varieties at different times. Each variety has its own price level and the price data for the whole year round do not always relate to the same variety or quality. And unfortunately the wholesalers do not record prices for different varieties separately. These factors have to be kept in view when studying the fluctuations in prices of chillies. Seasonal variations in the prices of dry chillies at some of the important markets in different States are discussed below :

Madras.—In the Madras State, Kakinada, Guntur, Tirunelveli and Tuticorin are some of the most important assembling and distributing markets for chillies and the price movements in these markets are fairly representative of the State as a whole. The diagram facing page 47 shows the percentage deviation of average monthly wholesale prices of dry chillies from their annual mean, during the years, 1946-50, at these markets. It will be observed that the price movements are irregular. (See Appendix No. XXI). In addition to the causes of irregularity in the movement of prices of chillies, already described above, another reason, in so far as the markets of Madras State are concerned, is that there are three crops of chillies during the year, which are harvested in December, August and April onwards respectively. So the fresh produce continues coming into the market off and on, and as such, the prices do not move on a set pattern.

At Kakinada, the prices reach their peak point in September at 8.1 per cent above the annual mean. They start declining

slowly from October onwards reaching the level of 2.2 per cent above the annual mean in December. The prices decline rapidly from January to March, the level in the latter month being 16.5 per cent below the annual mean. They improve by 13.0 per cent in April. The rise continues in May and after a slight recession in June, the prices go up to 6.8 per cent above the mean in July. After remaining steady in August they reach their top level in September. The extreme range of variation is 24.6 per cent. The maximum and minimum average prices during the period under review were Rs. 69-4-7 and Rs. 53-8-0 per maund respectively.

At Guntur, the extreme range of variation is 13.3 per cent, the high and low points being in November and January respectively. In November the prices are at their highest at 6.3 per cent above the annual mean. They recede to their lowest level in January, at 7.0 per cent below the annual mean. There is an improvement of 4.7 per cent in February followed by a slight decline in March. A slight improvement is noticed in April and May. After a slight dip in June, the prices start rising in July and reach 4.8 per cent above the mean in September. They reach their maximum level in November, after a slight recession in October. The highest average prices were Rs. 67-12-2 per maund while the lowest were Rs. 59-4-5 per maund.

At Tirunelveli, the highest point is touched in August at 10.5 per cent above the annual mean. The prices decline in the following two months and after a slight upward spurt in November-December go down to 5.5 per cent below the annual mean in January. There is a slight recovery in February-March followed by rapid recession, culminating into the lowest level in June at 15.0 per cent below the annual mean. There is a sharp rise in the following two months. In terms of money, the range of difference is Rs. 16-14-11 per maund, the highest and lowest average prices being Rs. 73-7-5 and Rs. 56-8-6 per maund respectively. The extreme range of variation is 25.5.

At Tuticorin also, August is the month of high prices, the price level during that month being 10.8 per cent above the annual mean. The prices decline in the next month to 2.4 per cent above the annual mean. After remaining steady in October-November and showing a slight gain in December, they recede sharply in January to touch the lowest level at 10.5 per cent below the annual mean. They gain slightly in February and after remaining more or less steady in March recede to 8.1 per cent below the mean in April. Thereafter, there is steady rise till August, when the highest point is reached. Thus the extreme range of variation is 21.3 per cent or Rs. 5-13-10 per maund. The highest and lowest average prices were Rs. 30-6-7 and Rs. 24-8-9 respectively during the period under review.

The price movements of dry chillies for the whole State based on the movements in the markets mentioned above are also irregular. The highest point is touched in August at 7.7 per cent above the annual mean. Thereafter, the prices move

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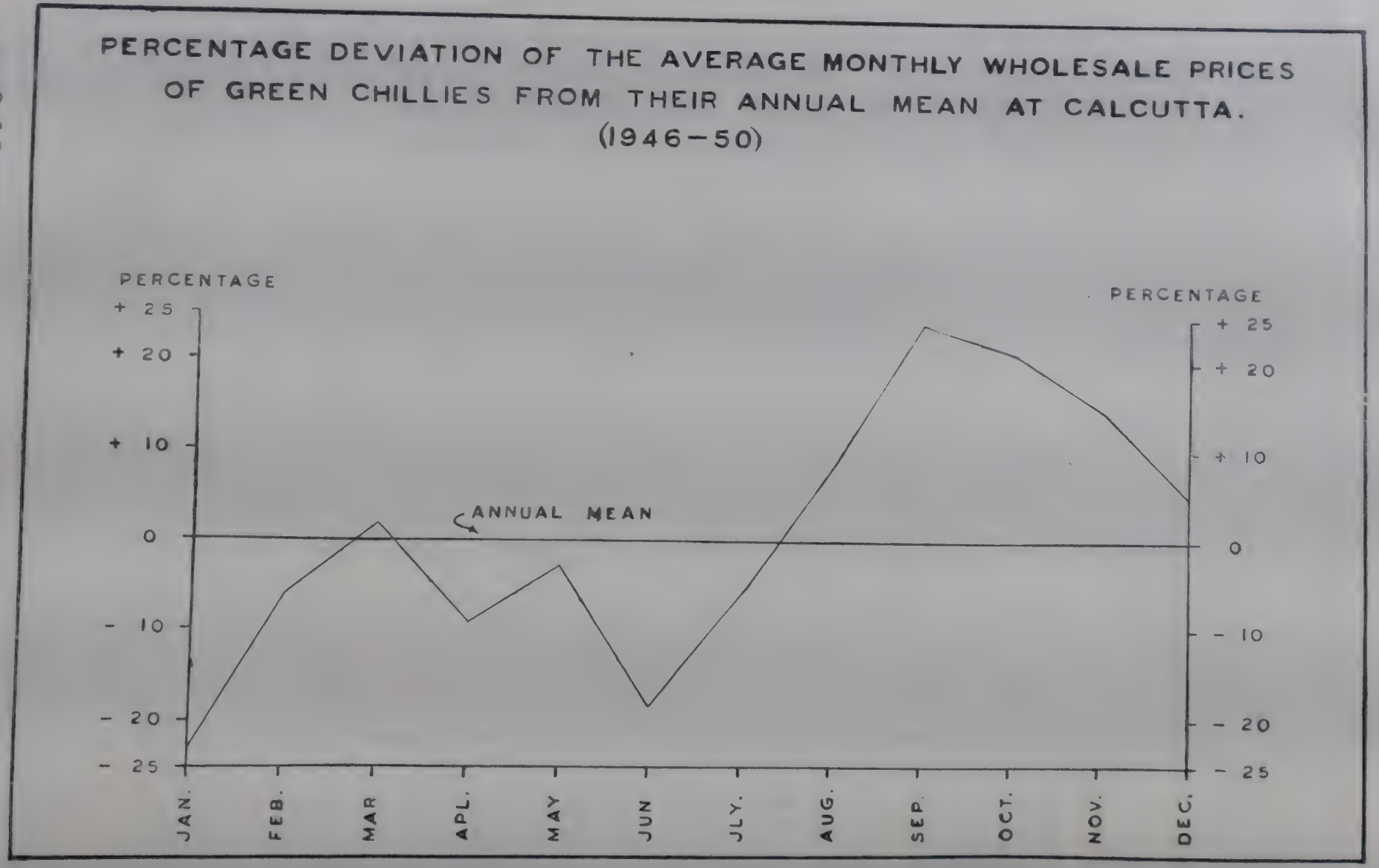
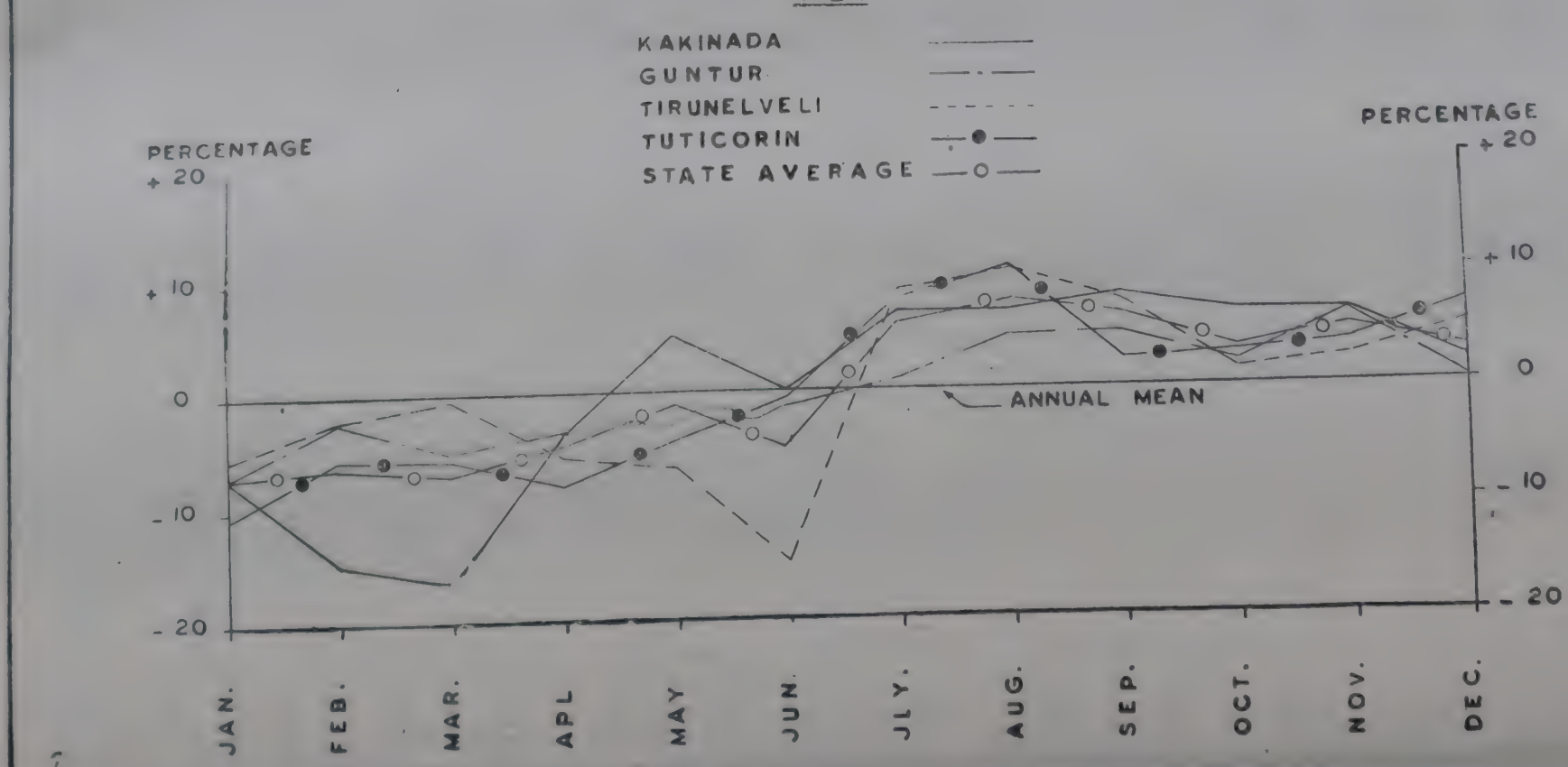


PERCENTAGE DEVIATION OF THE AVERAGE MONTHLY WHOLESALE PRICES OF DRY CHILLIES FROM THEIR ANNUAL MEAN AT KAKINADA, GUNTUR, TIRUNELVELI & TUTICORIN.
(1946–50)



downwards to reach the level of 3.3 per cent above the annual mean in October. There is a slight rise in November followed by a small recession in December. The prices fall downward sharply in January to touch the level of 7.0 per cent below the mean. After a very slight gain in February, the prices recede again in March, when the lowest level is reached at 7.1 per cent below the mean. There is a steady upward movement in April-May followed by a dip in June. Thereafter, the prices move up sharply reaching the highest level in August. The extreme range of variation is 14.8 per cent, which in terms of money is equal to Rs. 8-3-4 per maund. The highest and lowest average prices during the period under review were Rs. 59-11-10 and Rs. 51-8-6 per maund respectively.

Bombay.—The diagram facing page 48 shows the percentage deviation of average monthly wholesale prices of dry chillies from their annual mean, during the years, 1946-50, at Byadgi, Bijapur, Jalgaon and Sholapur markets. (See Appendix No XXII). It will be observed that price movements in different markets in the Bombay State are irregular and are dissimilar. The causes for this have already been explained in the preceding pages. At Byadgi, the most important primary market, prices remain at a low level from November to March, when the produce of the new crop is available. The lowest point at 10.7 per cent below the annual mean is touched in January, when the arrivals are at their maximum. Prices start improving steadily from February onwards and reach 11.8 per cent above the annual mean in June. After a slight set-back in July-August, they touch their highest level in September at 12.3 per cent above the annual mean. Thereafter, they start declining, falling to 10.4 per cent below the mean in November. After gaining slightly in December, they move down to their lowest level in January. Thus the extreme range of variation is 23.0 per cent, which is equal to Rs. 13-2-0 per maund ; the maximum and minimum average prices being Rs. 64-5-0 and Rs. 51-3-0 per maund respectively. Prices are high in June because large quantities of chillies are exported to consuming markets, in that month. The quotations are high again in September, it being the fag end of the season.

At Bijapur, the highest point in prices is touched in June, at 9.8 per cent above the annual mean. The prices are at their minimum at 7.6 per cent below the mean in January. The price movements at Bijapur are very irregular. They remain at a low level in February-March and then start moving upwards, reaching the peak point in June. Thereafter, the movements are irregular going down and upwards alternately. The extreme range of variation is 17.4 per cent *i.e.*, Rs. 9-8-0 per maund. The maximum and minimum average prices were Rs. 60-1-0 and Rs. 50-9-0 per maund respectively.

At Jalgaon, an important market, the price movements are at variance with those at Byadgi and Bijapur markets. The total range of variation is 13.2 per cent, the high and low points

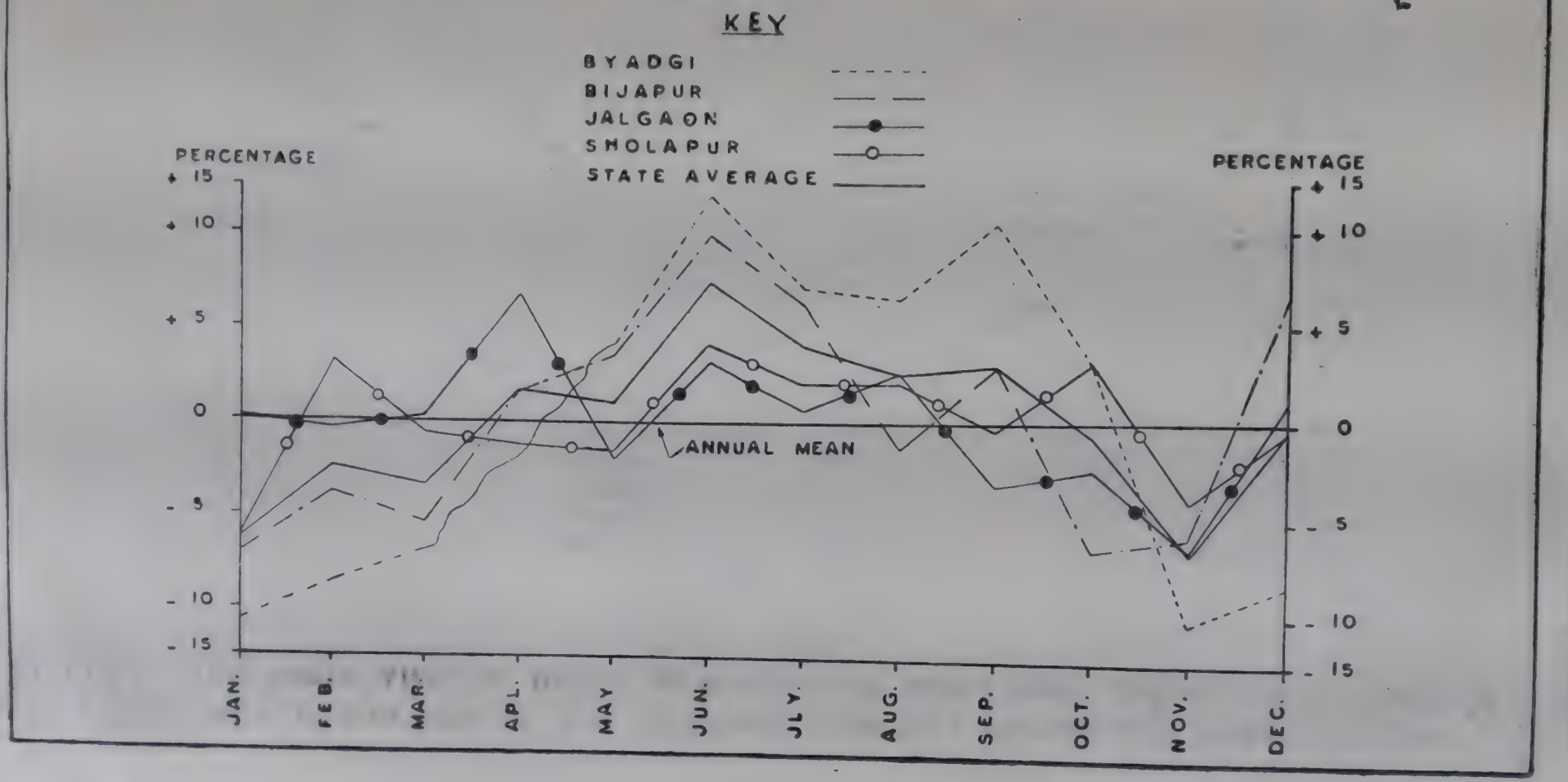
being 6.7 and 6.5 per cent above and below the annual mean respectively. The low point is touched in November. The arrivals increase from September onwards after the cessation of rains The prices improve slightly in December and after remaining more or less steady till March, reach their highest level in April. In May prices move down again but they recover in June. They reach their lowest level in November after moving up and down alternately from June onwards. The maximum and minimum average prices during the years 1946-50, were Rs. 55-1-0 and Rs. 48-4-0 per maund respectively.

At Sholapur, the highest level is reached in June at 4.2 per cent above the annual mean while the lowest point occurs in January at 6.3 per cent below the annual mean. Thus the total range of variation is 10.5 per cent, which is equal to Rs. 6-3-0 per maund. The highest average price *i.e.*, Rs. 61-2-0 per maund is recorded in June, when it is 4.2 per cent above the annual mean. The prices move down slowly to 0.3 per cent below the annual mean in September and after an upward spurt in October go down to 4.2 per cent below the mean in November. After recording a slight recovery in December, they decline sharply to their lowest level in January. Another upward move in February is followed by recession in the following three months. Then the prices shoot up to their maximum level in June. In short the price movements at Sholapur are also irregular.

Taking the State as a whole, the highest level in prices is reached in June at 7.3 per cent above the annual mean, the average price being Rs. 59-10-0 per maund. They recede to 2.6 per cent above the mean in August and remain steady in September. There is a recession to 0.6 per cent below the annual mean in October followed by a sharp decline in November, when the lowest level is touched at 6.7 per cent below the mean. After an upward spurt in December, there is another recession in January when the prices are at 6.3 per cent below the annual mean. Some improvement is noticed in February and March followed by a quicker rise in April, when the price level is at 1.7 per cent above the annual mean. After a slight dip in May the highest level is touched in June. The total range of variation is 14.0 per cent *i.e.*, Rs. 7-13-0 per maund, the highest and lowest average prices being Rs. 59-10-0 and Rs. 51-13-0 per maund respectively. As stated earlier the movements of prices are irregular.

Madhya Pradesh.—Malkapur, and Amravati are important assembling markets in Madhya Pradesh while Jabalpur and Nagpur are important consuming markets. The seasonal movements of prices in these markets give a fair indication of the conditions in the State as a whole. The diagram facing page 49 shows the percentage deviation of average monthly wholesale prices of dry chillies from their annual mean during the years 1946-50, at these markets. Average monthly wholesale prices during the years, 1943-50, in these markets are given in Appendix No. XXIII. The produce from the fresh crop starts

PERCENTAGE DEVIATION OF THE AVERAGE MONTHLY WHOLESALE PRICES OF DRY CHILLIES FROM THEIR ANNUAL MEAN AT BYADGI, BIJAPUR, JALGAON & SHOLAPUR. (1946–50)



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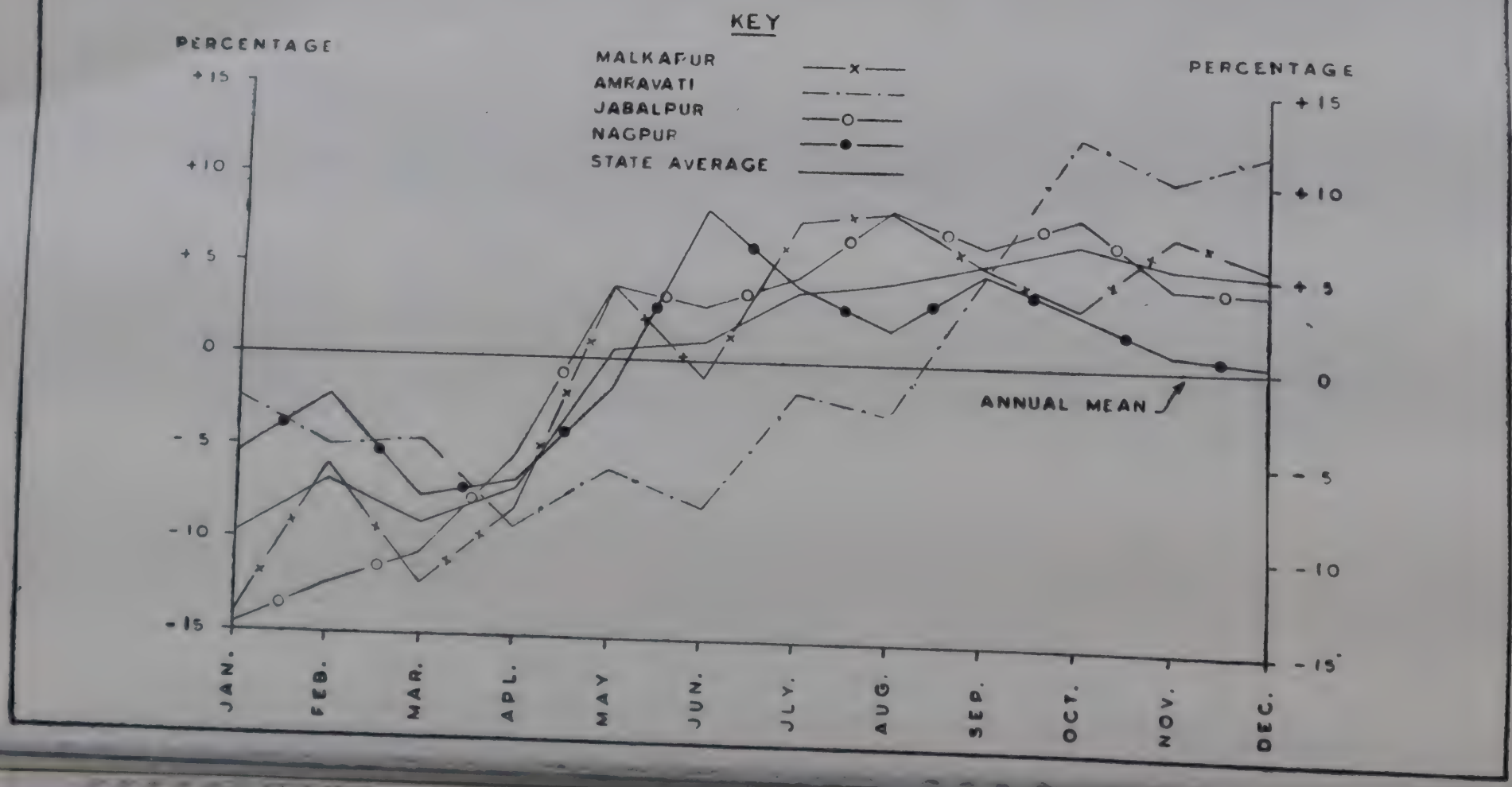
PERCENTAGE DEVIATION OF THE AVERAGE MONTHLY WHOLESALE PRICES OF DRY CHILLIES FROM THEIR ANNUAL MEAN AT MALKAPUR, AMRAVATI, JABALPUR & NAGPUR. (1946 – 50)



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coming into the market from April onwards but the prices usually maintain a high level during the hot season for the reason that the demand is heavy at that time, as the people make heavy purchases to last them through the monsoons.

At Malkapur, the lowest level is touched during the month of January at 14.0 per cent below the annual mean, while the highest point is reached in August at 8.2 per cent above the annual mean, the range of variation being 22.2 per cent. In terms of money the differences is Rs. 13-2-0 per maund of dry chillies, the maximum and minimum average wholesale prices being Rs. 64-0-0 and Rs. 50-14-0 per maund respectively. The prices which are at their maximum in August, recede steadily in the following two months, reaching the level of 3.2 per cent above the annual mean in October. They spurt up again in November to 7.1 per cent above the mean. A slight recession in December is followed by a sharp downward movement in January, when the lowest level is reached at 14.0 per cent below the annual mean. An improvement in February is followed by another dip in March. The prices improve in April-May and after receding slightly in June, move up sharply in the next two months, when the highest level is touched.

At Amravati, the price movements are dissimilar to those at Malkapur. The maximum and minimum prices are recorded in October and April respectively. The lowest average monthly wholesale prices during the years, 1946-50, at Amravati were Rs. 49-9-0 per maund *i.e.,* 9.1 per cent below the annual mean. After moving up and down till August, the prices start improving rapidly reaching their highest level in October at Rs. 61-4-0 per maund, *i.e.* 12.3 per cent above the annual mean. There is a very slight recession in November followed by a recovery in December. The prices, however, maintain a high level from September to December. They decline sharply in the following months reaching their lowest level in April. The extreme range of variation at Amravati is 21.4 per cent *i.e.,* Rs. 11-11-0 per maund.

Nagpur and Jabalpur are very important consuming markets. The highest level of prices at Nagpur is touched in June at 8.2 per cent above the annual mean *i.e.,* at Rs. 67-2-0 per maund. The prices recede to 2.0 per cent above the annual mean in August. After an upward spurt in September, they move down steadily to 0.3 per cent above the mean in December. There is a sharp decline in January to 5.4 per cent below the mean and after an upward move in February, the prices touch their lowest level in March at 7.6 per cent below the mean. There is a very slight improvement in April followed by a sharp upward move culminating in the highest point in June. The extreme range of variation is 15.8 per cent *i.e.,* Rs. 9-13-0 per maund, the highest and lowest average prices being Rs. 67-2-0 and Rs. 57-5-0 per maund respectively. At Jabalpur, the prices are at their highest in August at 8.3 per cent above the annual mean. A slight recession is noticed in September followed by

recovery in October. The prices go down to 4.1 per cent above the annual mean in December. Thereafter, the prices decline very sharply in January when the lowest point is touched at 14.6 per cent below the annual mean. From February onwards, they start moving upwards reaching their maximum level in August, after a slight dip in June. The maximum range of variation is 22.9 per cent *i.e.*, Rs. 17-14-0 per maund, the highest and lowest average prices being Rs. 84-5-0 and Rs. 66-7-0 per maund respectively.

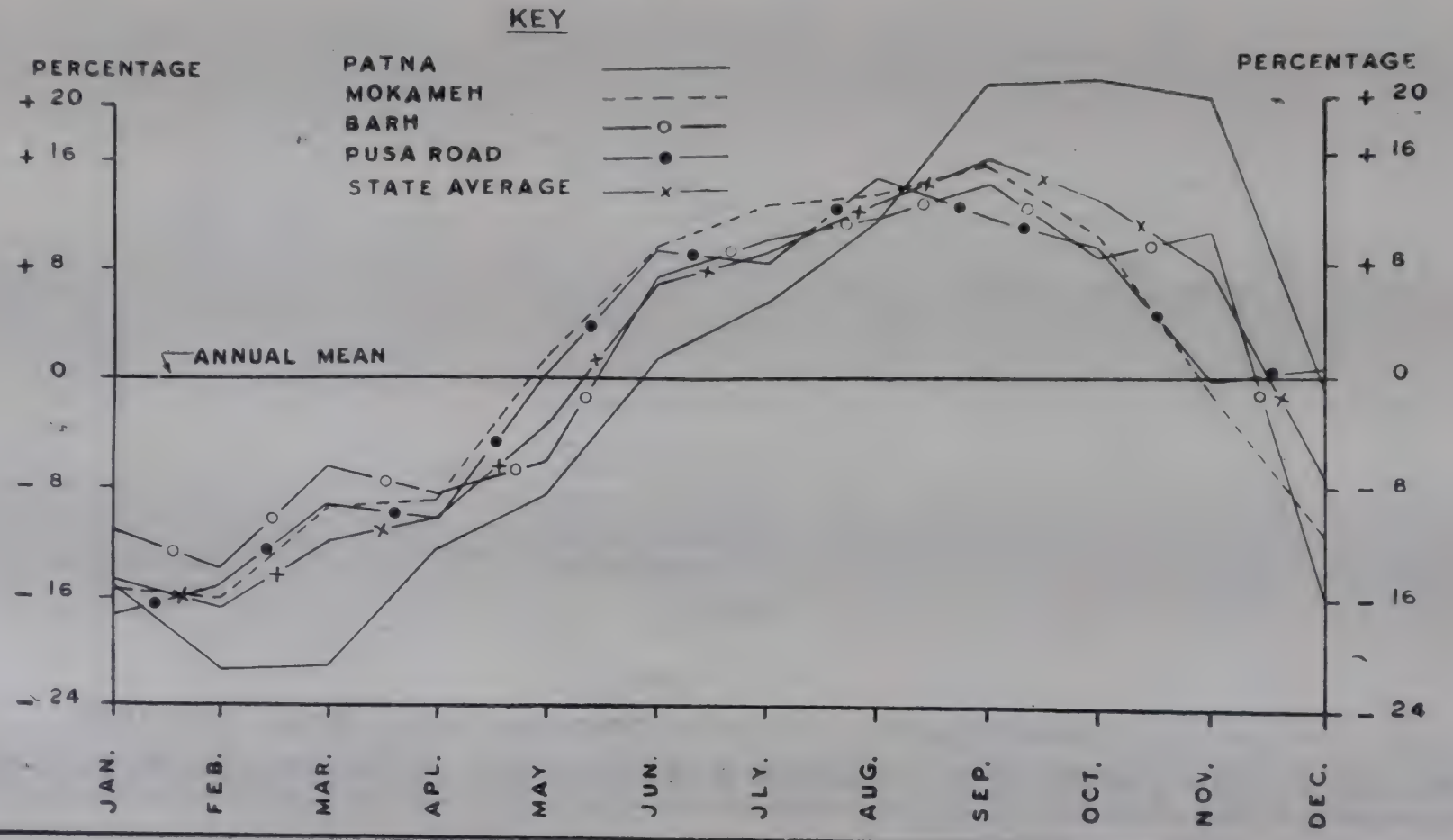
Taking the State as a whole, the prices maintain a low level from January to April. They are at their lowest level at 9.6 per cent below the annual mean in January. There is a slight improvement in February followed by recession in March. From April onwards the prices start moving up till they reach the highest point in October at 6.7 per cent above the annual mean. A slight recession is observed in November-December. The total range of variation is 16.3 per cent only or Rs. 10-5-0 per maund, the highest and lowest average prices being Rs. 67-10-0 and Rs. 57-5-0 per maund respectively. It will be observed that the price fluctuations in the markets of Madhya Pradesh also do not follow any set pattern. The reasons for this have already been explained in the preceding pages.

Bihar.—The diagram facing this page shows the percentage deviation of average monthly wholesale prices of dry chillies from their annual mean at Patna, Mokameh, Barh and Pusa Road during the years, 1946-50. For actual price figures See Appendix No. XXIV. During the period 1946-50, the maximum average prices of dry chillies at Patna *viz.* Rs. 76-11-0 per maund were 43.0 per cent higher than the minimum average prices, the difference in terms of money being Rs. 27-2-0 per maund. The average wholesale prices during the first month of the season *i.e.*, January were Rs. 53-9-0 per maund as against 49-9-0 in February, when there is usually an increase in supplies. The prices are at their lowest level in February at 21.5 per cent below the annual mean. There is a slight upward movement in March but, thereafter, there is a steady improvement till October, when the maximum prices *i.e.*, Rs. 76-11-0 per maund are quoted. There is a very slight recession in November followed by a steep decline in the following three months.

At Mokameh, the movements are similar to those in Patna, except that the highest point is touched in September instead of October. The maximum range of variation is 31.7 per cent, the highest and the lowest points being 15.4 and 16.3 per cent above and below the annual mean respectively. In terms of money, the highest average price during the period under review was Rs. 69-0-0 per maund, while the lowest was Rs. 50-1-0 per maund.

At Barh, the price movements are rather irregular. The highest level is reached in September, while the lowest point is touched in December. The difference in the maximum (Rs. 67-0-0 per maund) and minimum (Rs. 49-6-0 per maund)

PERCENTAGE DEVIATION OF THE AVERAGE MONTHLY WHOLESALE PRICES OF DRY CHILLIES FROM THEIR ANNUAL MEAN AT PATNA, MOKAMEH, BARH AND PUSA ROAD. (1946-50)



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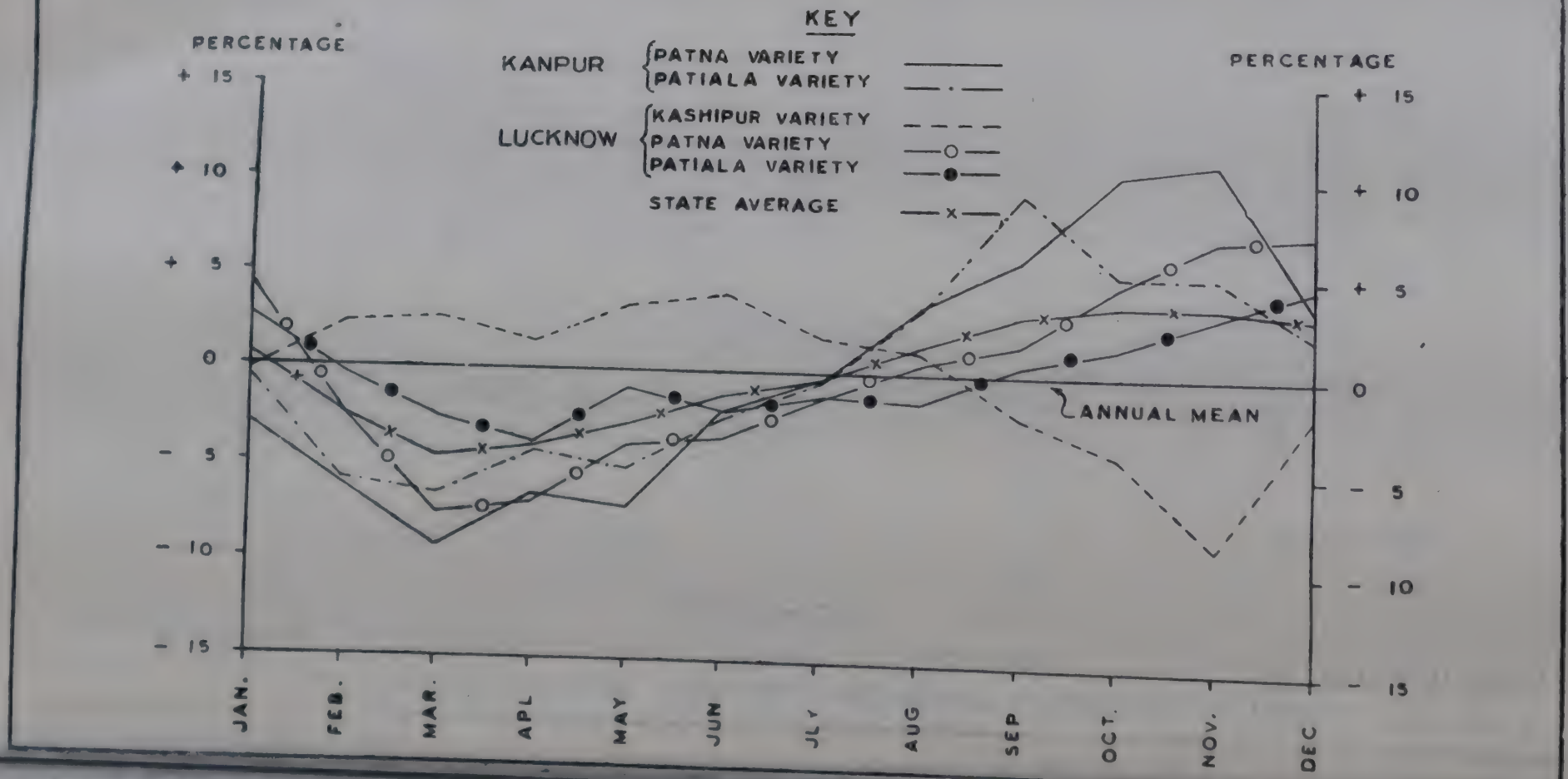
PERCENTAGE DEVIATION OF THE AVERAGE MONTHLY WHOLESALE PRICES OF DRY CHILLIES FROM THEIR ANNUAL MEAN AT KANPUR AND LUCKNOW.
(1946 – 50)



average prices is Rs. 17-10-0 per maund or 30.0 per cent. There is a slight decline in prices in October-November followed by a precipitate fall to the lowest point in December at 16.0 per cent below the annual mean. There is a slight improvement in January, followed by another recession in February. The prices remain low in the next three months, though at a higher level than in February. They improve to 7.6 per cent above the mean in June and keeping up the tempo, culminate at the highest level in September at 14 per cent above the mean.

The fluctuations in prices of dry chillies at Pusa Road are also irregular. The highest level is touched in August at 14.4 per cent above the annual mean, the average prices being Rs. 63-0-0 per maund. There is a rapid decline in the following months till November, when the price level is at 0.4 per cent below the annual mean. After remaining steady in December, there is a steep fall in January to the lowest level at 17.4 per cent below the mean, the average price at that time being Rs. 45-8-0 per maund. The total range of variation is thus 31.8 per cent or Rs. 17-8-0 per maund. The prices start improving, thereafter, and except for slight set-backs in April and July, they keep going up till August when the peak point is touched.

Taking the State as a whole, the average prices reach their peak point in September at 15.7 per cent above the annual mean. They recede steadily during the following months to touch the level of 7.1 per cent below the mean in December. In January there is a further fall of 7.6 per cent. The prices are at their lowest level in February at 16.9 per cent below the annual mean. The upward move starts from March onwards, which continues right up to September. The total range of variation is 32.6 per cent or Rs. 19-5-0 per maund, the maximum and minimum average prices being Rs. 68-8-0 and Rs. 49-3-0 per maund respectively.

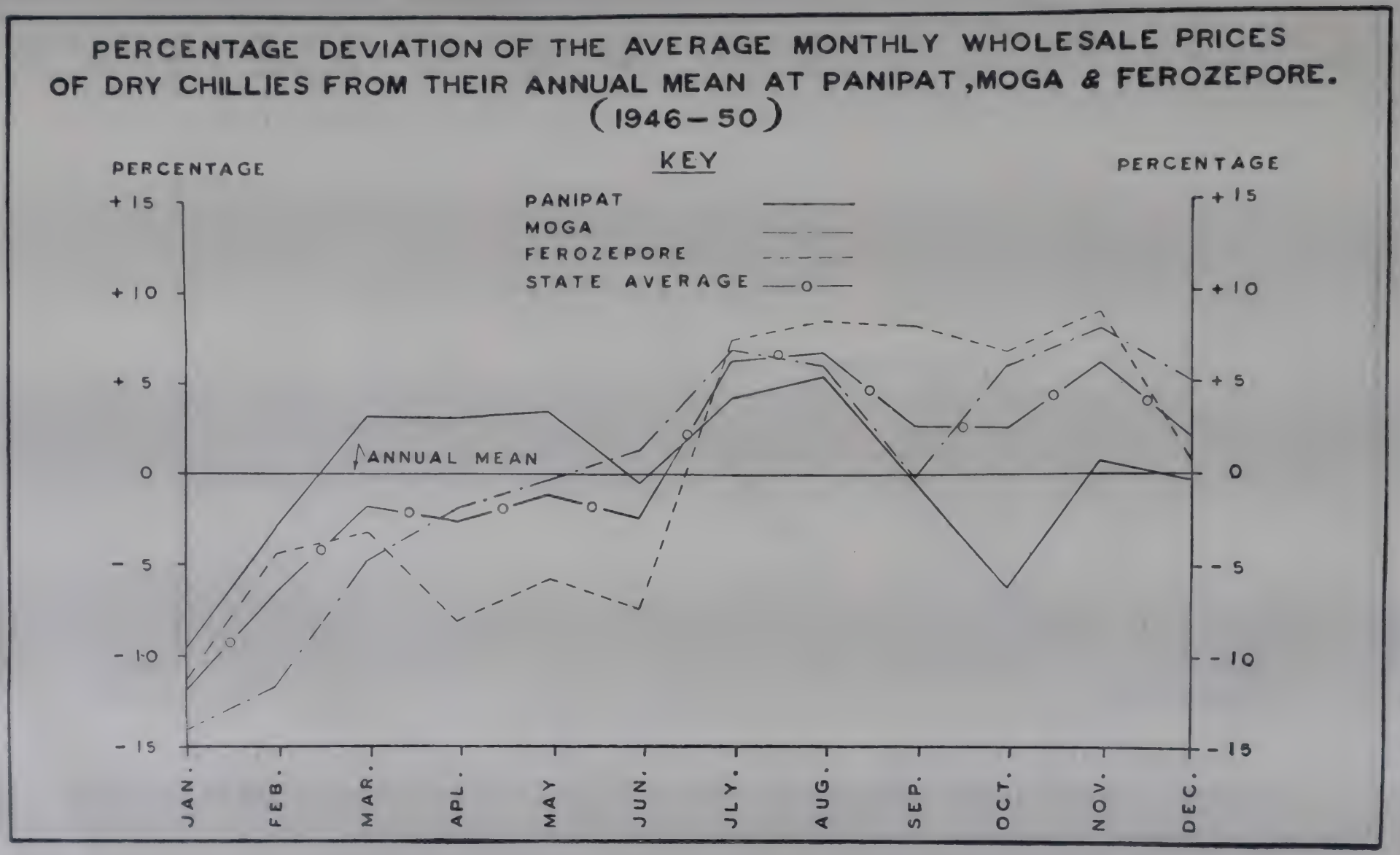
Uttar Pradesh.—The diagram facing this page shows the percentage deviation of average monthly wholesale prices of dry chillies from their annual mean at Kanpur and Lucknow, during the years 1946-50. (See Appendices No. XIV and XV). The movement of prices in the case of *Patna* chillies at Kanpur is irregular depending upon the existing stocks and quantities imported at different times of the year. The maximum average price is received in November, it being Rs. 70-6-0 per maund or 10.9 per cent above the annual mean. Thereafter, the prices move down steadily to their minimum level in March, at Rs. 57-10-0 per maund or 9.2 per cent below the annual mean. The total range of variation is thus 20.1 per cent or Rs. 12-12-0 per maund. The prices remian low in April and May. After gaining some ground in the following five months, they reach their maximum in November. *Patiala* chillies are imported from Patiala and the East Punjab States Union. The prices of this variety at Kanpur are at their highest in September at

9.3 per cent above the annual mean, the average price bein Rs. 72-12-0 per maund. They remain at Rs. 70-0-0 per maun in the following two months. Thereafter, they decline steadil till March, when the lowest level is touched at 6.5 per cent belo the annual mean, the average price being Rs. 62-4-0 per maun Then the prices move up steadily except for a slight set-bac in May. The total range of variation is 15.8 per cent or Rs. 10-8 per maund.

At Lucknow, *Kashipur* chillies, produced within the stat get their highest prices in June at 4 per cent above the annu mean, while the lowest point is touched in November at 8.7 pe cent below the annual mean. Thus the total range of variatic is 12.7 per cent. In terms of money the difference is Rs. 8-3 per maund, the maximum and minimum average prices beir Rs. 67-0-0 and Rs. 58-13-0 per maund respectively. In the case *Patna* chillies the maximum price quotations are recorded December at Rs. 69-10-0 per maund or 7.3 per cent above th annual mean. Thereafter, there is a steady decline in prices t March, when the lowest level is touched at 7.5 per cent belo the annual mean, the average price being Rs. 60-0-0 per maun There is a very slight recovery in April, followed by a steac upward movement right up to December when the highest lev is attained. The total range of variation is 14.8 per cent Rs. 9-10-0 per maund. In the case of *Patiala* chillies also, th highest level is reached in December at Rs. 64-13-0 per maund 4.6 per cent above the annual mean. Thereafter, there is a steac downward movement till April, when the lowest level is touch at Rs. 59-10-0 per maund or 3.7 per cent below the annual mea Then onwards, there is a slow and steady improvement right u to December. The total range of variation is 8.3 per cent Rs. 5-3-0 per maund.

The price movements for the whole state, based on th movements at Kanpur and Lucknow, show that the peak poi is touched in October-November at 3.5 per cent above the annu mean. The prices recede gradually to reach their lowest lev at 4.6 per cent below the annual mean in March. Thus the tot range of variation is 8.1 per cent or Rs. 5-3-0 per maund, th maximum and minimum average prices being Rs. 66-8-0 a Rs. 61-5-0 per maund respectively. Thereafter, there is a steac upward movement till the highest level is touched in Octobe November.

Punjab.—In the Punjab also, the price movements of chilli have not been regular during the period under review, *vi* 1946-50. The diagram facing this page showing the percenta deviation of average monthly wholesale prices of dry chilli from their annual mean at Panipat, Moga and Ferozepur, duri the years 1946-50, clearly illustrates this. (See Appe dix No. XXV). At Panipat, the highest prices are record in August at 5.3 per cent above the annual mean, the avera



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PERCENTAGE DEVIATION OF THE AVERAGE MONTHLY WHOLESALE PRICES OF DRY CHILLIES FROM THEIR ANNUAL MEAN AT CUTTACK. (1946—50)
PERCENTAGE
+ 15
+ 10
+ 5
0
- 5
- 10
- 15
ANNUAL MEAN
JAN.
FEB.
MAR.
APL.
MAY.
JUN.
JLY.
AUG.
SEP.
OCT.
NOV.
DEC.

price being Rs. 52-9-0 per maund. The prices decline to 6.1 per cent below the mean in October. After an upward spurt in November, they recede again in December. There is a sharp decline in January when the lowest level is touched at 9.6 per cent below the annual mean, the average price being Rs. 45-2-0 per maund. Thereafter, there is a steady upward movement upto August except for a slight depression in June. The extreme range of variation is 14.9 per cent only or Rs. 7-7-0 per maund.

At Moga, the highest average prices *viz.*, Rs. 61-15-0 per maund are quoted during November. There is a downward move in December followed by a precipitate fall in January, when the lowest level is touched at 14.1 per cent below the annual mean, the average price being Rs. 49-5-0 per maund. In the following months, there is a steady improvement in prices right upto July. With a slight recession in August-September, the prices move up again in the following months to reach their highest level in November at 7.9 per cent above the annual mean. The extreme range of variation is 22.0 per cent or Rs. 12-10-0 per maund.

At Ferozepur, an important consuming centre in the Punjab, the total range of variation is 20.1 per cent or Rs. 12-1-0 per maund. As at Moga, the maximum prices are received in November, the average being Rs. 65-3-0 per maund, while the lowest average price *i.e.*, Rs. 53-2-0 is recorded in January. The prices fall sharply in December and January touching their lowest level in the latter month at 11.3 per cent below the annual mean. Thereafter, they move up and down, the price level in June being 7.3 per cent below the mean. With the advent of rains they shoot up to 7.3 per cent above the mean in July. They remain more or less steady in the next three months and touch their highest level in November at 8.8 per cent above the annual mean.

Taking the State as a whole, the prices attain their highest level in August at 6.6 per cent above the annual mean. They recede slightly in September-October followed by an upward spurt in November. They decline again in December and reach their lowest level in January at 11.8 per cent below the annual mean. They move upto 1.8 per cent below the mean in March and after very slight movements either way in the next three months, go up to 6.2 per cent above the mean in July. The highest point *viz.*, 6.6 is touched in August, as stated above. The total range of variation is 18.4 per cent *i.e.*, Rs. 10-4-0 per maund. the maximum and minimum average prices being Rs. 59-7-0 and Rs. 49-3-0 per maund respectively.

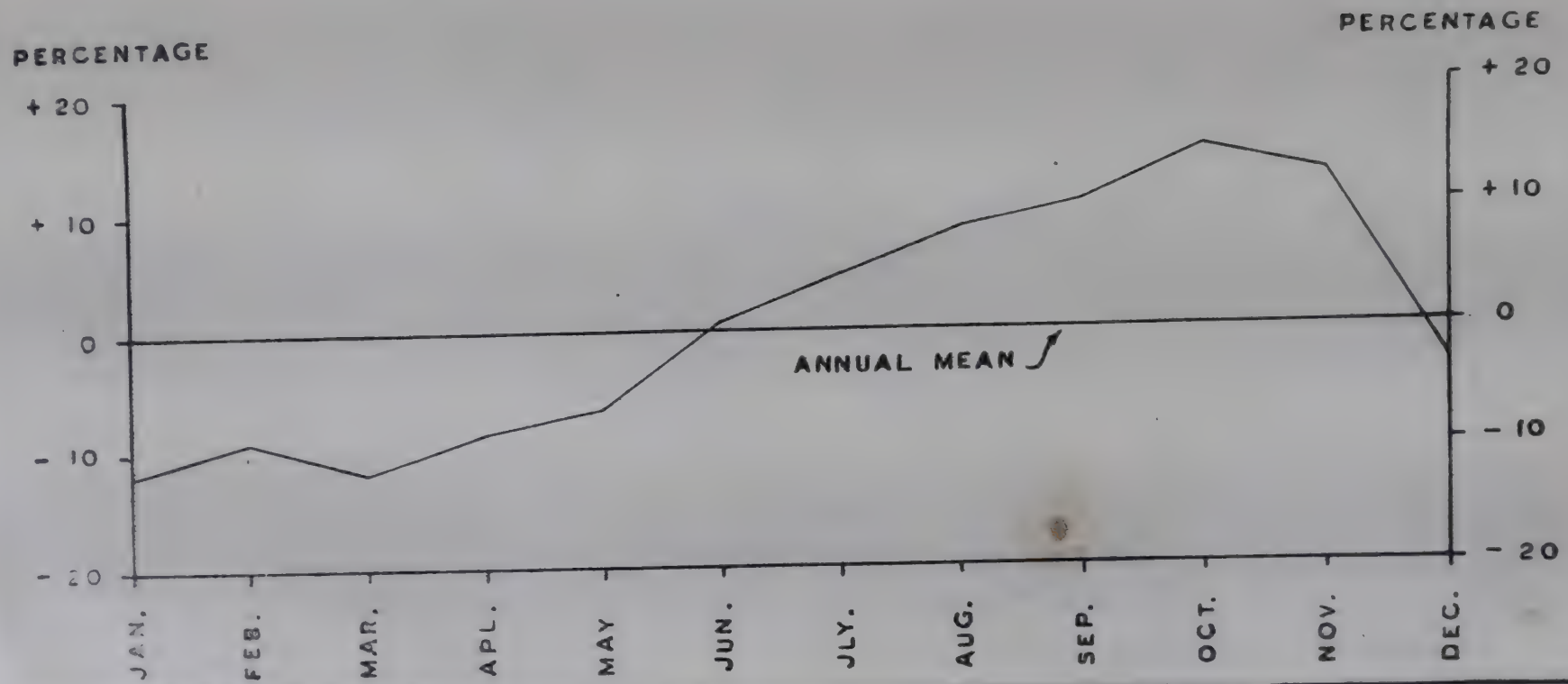
Orissa.—Cuttack is the most important assembling and consuming market for chillies in Orissa. The diagram facing this page shows the percentage deviation of average monthly wholesale prices of dry chillies from their annual mean at Cuttack during the years 1946-50. (See Appendix No. XXVI)

The locally produced chillies start coming into the market fr February onwards. The prices go down in January as stockists dipose of the old stock before the arrival of the j duce of the new crop. The prices in the following 4 to 5 mor are, therefore, comparatively low. The total range of varia is 23.4 per cent, the highest and lowest levels being 12.5 10.9 per cent above and below the annual mean respectiv The maximum average price is Rs. 73-9-0 and this level is touc in October. The prices recede to Rs. 68-6-0 in November or per cent above the annual mean. After an upward spurt December, the fall precipitately in January to their lowest le at 10.9 per cent below the annual mean. The prices reco slightly in February-March, and remaining more or less at t level up to June, move up to 3.2 per cent above the annual m in July-August shows further improvement. A recession in S tember is followed by the highest prices in October. The pr go up after June due to the stockist's anxiety to dispose of stocks before the advent of rains because humidity cau deterioration of the stored chillies.

West Bengal.—As stated earlier, Calcutta is the most imp tant consuming market in West Bengal. The diagram fac this page shows the percentage deviation of average mont wholesale prices of dry chillies of *Patna* variety from th annual mean during the years, 1946-50, at Calcutta. (Appendix XXVII). The prices of *Patna* chillies are at th highest level at Calcutta in October at 14.9 per cent above annual mean. They fall slightly in November but recede shar in December and January, the price level in the latter mo being 11.8 per cent below the annual mean. After a sli upward spurt in February, prices go down to their lowest le at 11.9 per cent below the mean, in March. They start mov up slowly in April-May but improve rapidly in the follow months, till the highest level is reached in October. Thus extreme range of variation is 26.8 per cent *viz.*, Rs. 20-3-0 maund, the highest and lowest average prices being Rs. 86-1 and Rs. 66-8-0 per maund respectively.

Hyderabad.—In the Hyderabad State, Warangal a Nizamabad are important primary markets while Hyderabac the most important consuming market. The diagram fac page 55 shows the percentage deviation of average mont wholesale prices of dry chillies from their annual mean dur the years, 1946-50, at Hyderabad, Warangal and Nizamab (See Appendix No. XXVIII). The prices at Warangal at their minimum in January and at their highest in Octol the total range of variation being 30.9 per cent. The low pc in January is at 17.4 per cent below the annual mean. Th is a slight improvement in February followed by a recession March. From then onwards, there is a steady improvem till August, when the price level is 11.6 per cent above the ann mean. After a slight recession in September, the prices to their highest level in October at 13.5 per cent above the ann

PERCENTAGE DEVIATION OF THE AVERAGE MONTHLY WHOLESALE PRICES OF DRY CHILLIES FROM THEIR ANNUAL MEAN AT CALCUTTA. (1946–50)



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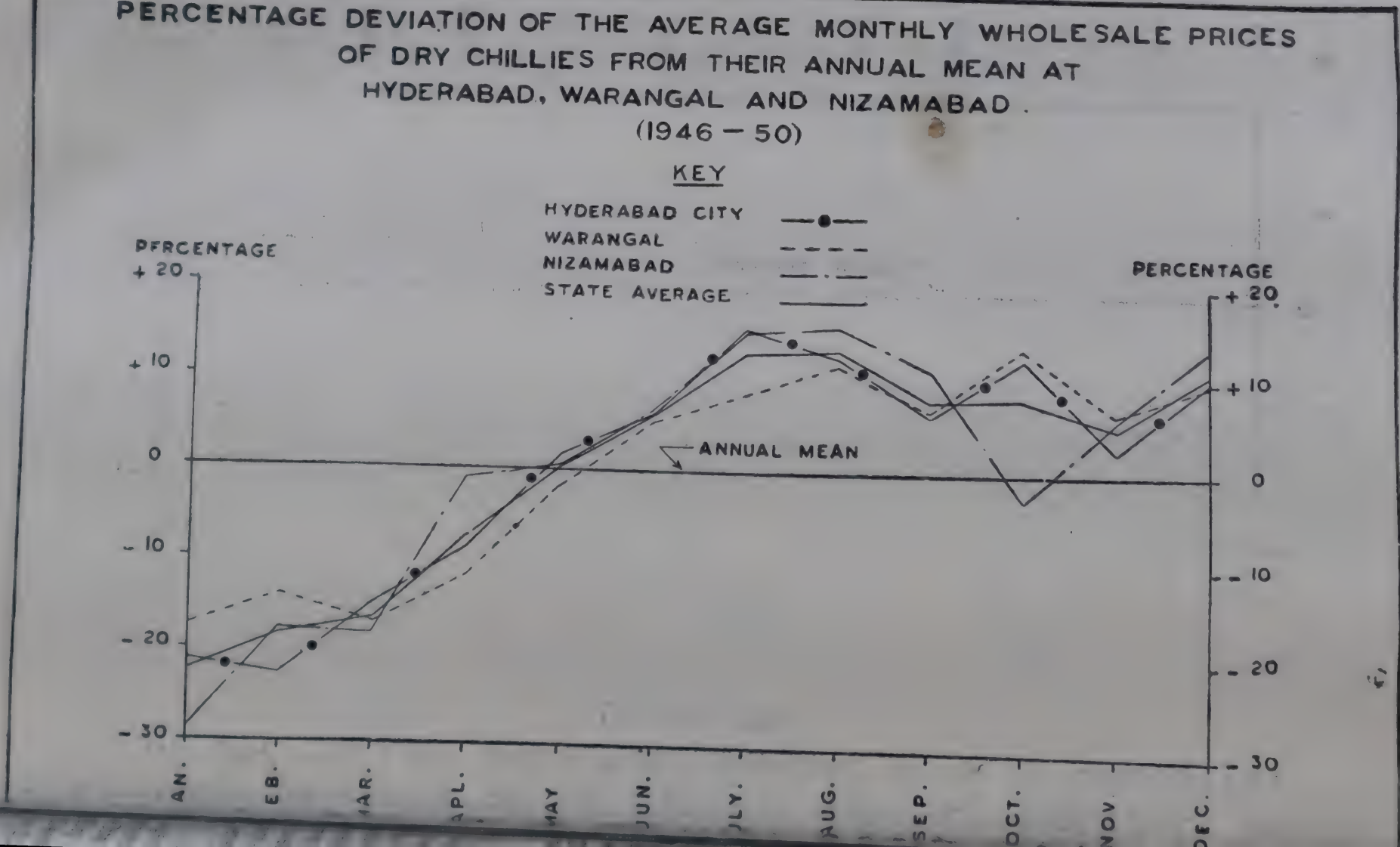
PERCENTAGE DEVIATION OF THE AVERAGE MONTHLY WHOLESALE PRICES OF DRY CHILLIES FROM THEIR ANNUAL MEAN AT HYDERABAD, WARANGAL AND NIZAMABAD.
(1946 – 50)



ean. After a downward movement in November and recovery n December, the prices recede sharply in January to touch their owest level. The highest and lowest average prices were s. 58-1-0 and Rs. 42-4-0 per maund respectively.

At Nizamabad also, the prices are at their lowest level in anuary, being 28.8 per cent below the annual mean. They ove up to the level of 17.8 per cent below the mean in February nd after remaining steady in March, improve sharply in April. he upward move continues steadily till August, when the prices each their highest level at 15.8 per cent above the annual mean. hereafter, there is a minor dip in the following months till ctober. In November, the prices improve again and after eaching the level of 13.4 per cent above the mean in December, ey decline sharply to their lowest level in January. The otal range of variation is 44.6 per cent, which is equal to s. 19-11-0 per maund. The maximum and minimum average rices at Nizamabad were Rs. 51-1-0 and Rs. 31-6-0 per maund espectively.

In the Hyderabad City, the extreme range of variation is qual to 37.7 per cent *i.e.*, Rs. 19-8-0 per maund. The maximum verage price is recorded in July at Rs. 59-9-0 per maund, the evel being 15.2 per cent above the annual mean. The prices move own to 6.1 per cent above the mean in September but recover o 12.2 per cent above the mean in October. After another dip n November and recovery in December, the prices shoot down n January to 21.1 per cent below the mean. In February the owest point is touched at 22.5 per cent below the annual mean, ne average price quotation at that time being Rs. 40-1-0. Marked mprovement is noticed in the succeeding five months, which nds in July at the level of 15.2 per cent above the mean. The rice fluctuations at Hyderabad are more or less in sympathy with those at Nizamabad.

For the Hyderabad State, as a whole, the prices are at their ighest level in August at 13.2 per cent above the annual mean, he average price being Rs. 55-7-0 per maund. There is gradual decline in the price level in the following three months followed y some recovery in December. There is, however, a sheer rop in January, when the lowest point is touched at 22.2 per ent below the annual mean, the average price being Rs. 38-2-0 er maund. The total range of variation is 35.4 per cent, which s equal to Rs. 17-5-0 per maund. After remaining low in Febru- ry-March the prices move up rapidly reaching their highest evel in August.

Mysore.—The diagram facing page 56 shows the percent- ge deviation of average monthly wholesale prices of dry chillies rom their annual mean, during the years, 1946-50, at Bangalore City and Davangere markets. (See Appendix No. XXIX). Dry chillies start coming into the market from November- December onwards. At Bangalore the total range of variation s 21.3 per cent, the high and low points being 11.1 per cent and

10.2 per cent, above and below the annual mean respectively. The highest point is touched in September, the price level being at Rs. 64-15-0 per maund. The prices recede to 3.8 per cent below the annual mean by December but fall heavily in January to touch the bottom level at 10.2 per cent below the mean, the average price being Rs. 52-8-0 per maund. So the difference between the highest and lowest average prices is Rs. 12-7-0 per maund. The prices rise steadily in the following months, except for a slight recession in July and reach their highest level in September.

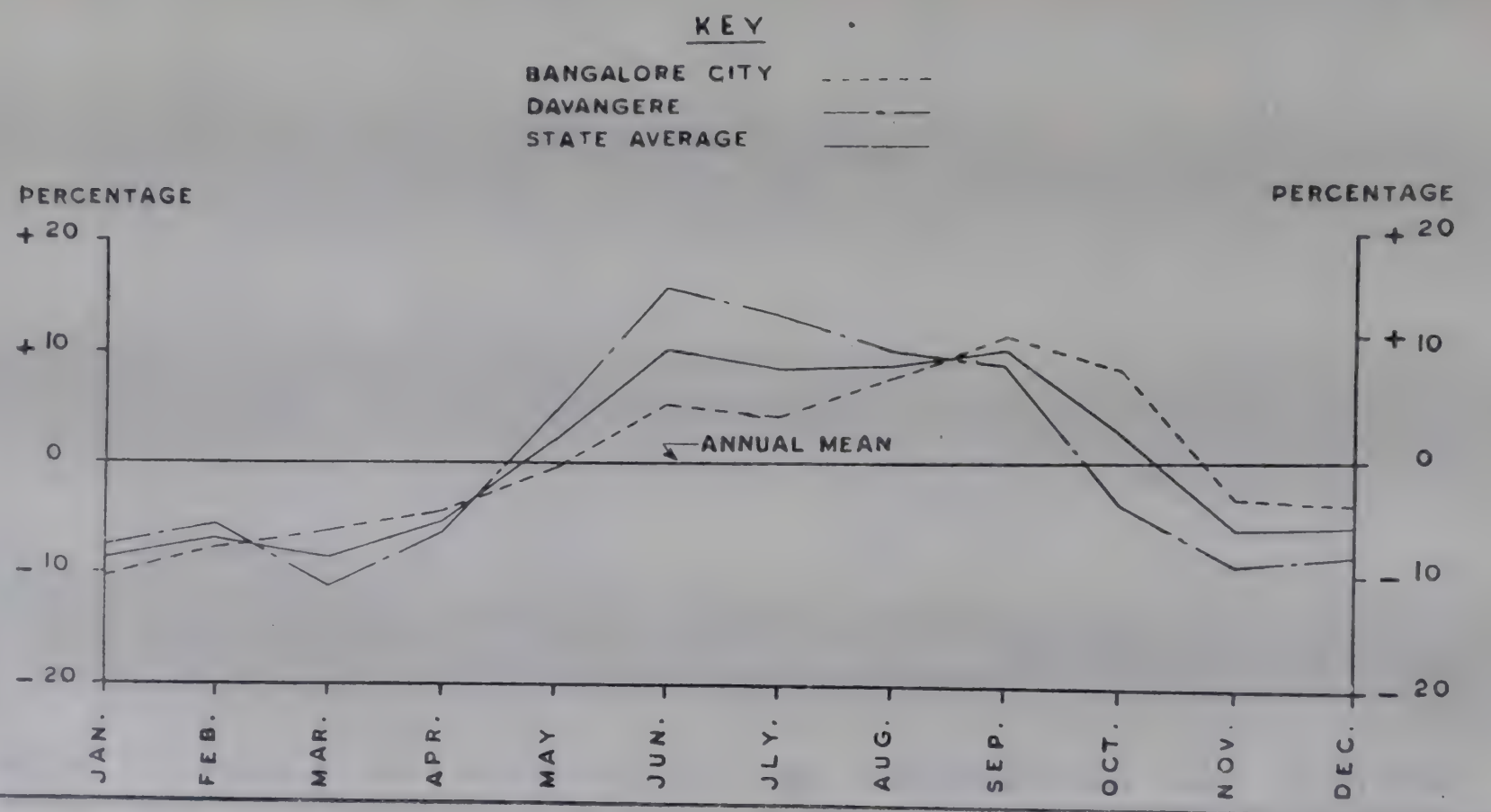
At Davangere, the high point in prices is touched in June at 15.5 per cent above the annual mean. The prices recede slowly in the next three months but fall heavily in October and November, the level in the latter month being 9.1 per cent below the annual mean. After a very slight recovery in December, they start moving down again, till they reach their lowest level in March at 11.0 per cent below the annual mean. There is a rapid improvement in the next three months, culminating in the peak point in June. Thus the total range of variation is 26.5 per cent *i.e.,* Rs. 13-13-0 per maund. The maximum and minimum average prices of dry chillies at Davangere during the period under review were Rs. 60-3-0 and Rs. 46-6-0 per maund respectively.

On the average, the prices in the Mysore State attain their highest level in June and again in September at 10.0 per cent above the annual mean. There is a slight dip in July and August. Prices recede in October to 2.5 per cent above the annual mean followed by a sharp decline in the following three months. The lowest point is touched in January at 8.8 per cent below the mean. After a slight upward spurt in February, the prices go down again in March. In the following three months they move up and reach their peak point in June. The total range of variation is 18.8 per cent *i.e.*, Rs. 10-6-0, per maund, the maximum and minimum average prices being Rs. 60-13-0 and Rs. 50-7-0 per maund respectively.

(*d*) *Trend of wholesale prices in some of the principal primary and secondary markets.* The variation in the wholesale prices from year to year cannot be explained adequately due to the absence of authentic figures of production for the same period for which the price data are available. Moreover, for the purpose of comparison of prices, it is necessary that the produce should be of the same variety and quality throughout the period under review. Since this is not possible, the trend of prices can be discussed only in a general way. The trend of wholesale prices based on the available data is discussed below :

Table No. 26 below based on Appendix No. XXI shows the average annual wholesale prices of dry chillies during the years

PERCENTAGE DEVIATION OF THE AVERAGE MONTHLY WHOLESALE PRICES OF DRY CHILLIES FROM THEIR ANNUAL MEAN AT BANGALORE CITY & DAVANGERE. (1946-50)



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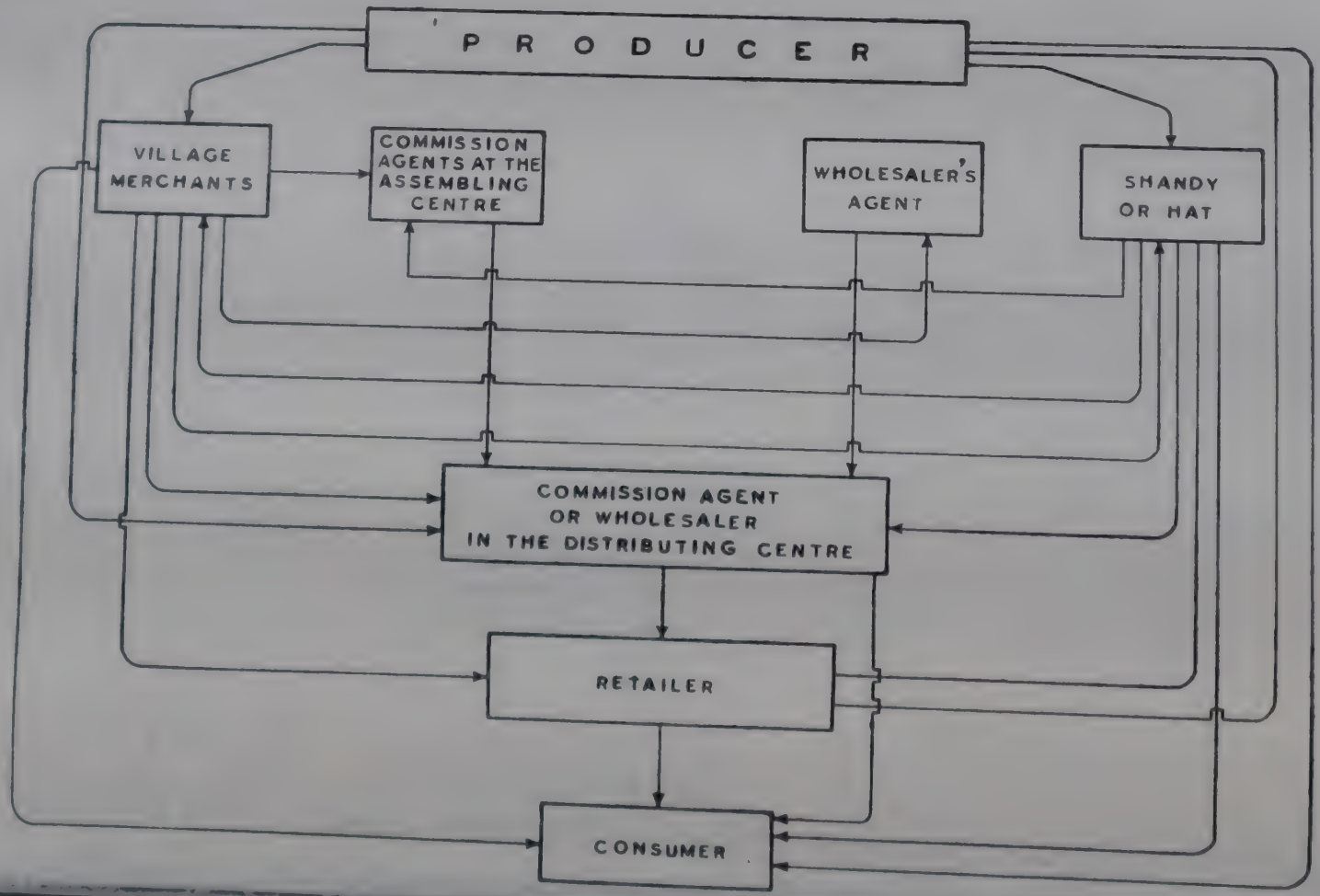
MAIN CHANNELS OF ASSEMBLING AND DISTRIBUTION OF CHILLIES



1941-50, at Kakinada, Guntur, Tirunelveli and Tuticorin markets in the Madras State.

TABLE NO. 26

Average annual wholesale prices of dry chillies in the Madras State

(In rupees and annas per maund of 82 2|7 lb.)

Year	MARKETS			
	Kakinada	Guntur	Tirunelveli	Tuticorin
	Rs. As.	Rs. As.	Rs. As.	Rs. As.
1941	11 15	9 11	10 7	12 12
1942	17 13	17 5	15 9	19 13
1943	38 11	33 11	30 7	31 7
1944	34 2	32 13	21 1	20 13
1945	39 14	38 14	30 12	30 2
1946	57 4	56 6	53 6	52 11
1947	49 3	54 9	59 15	52 11
1948	40 8	39 13	57 14	54 6
1949	73 10	74 2	74 7	77 1
1950	99 15	93 14	91 13	92 6

It will be observed that the prices were quite low in 1941. They shot up in 1942 and this process was accelerated after the entry of Japan into the world war. The flight in prices was checked to a certain extent in 1944 after the enforcement of restrictions on the exports of chillies. The upward move started again in the following year and showed no sign of abatement till 1947 and 1948, when the disturbed conditions, on account of the partition of the country, had some unsettling effects in many markets. The upward move started again in 1949 and prices reached their highest ever in the year 1950. Taking the price index as 100 in 1941, the prices in 1950 stood at 837.2, 969.0, 879.6 and 724.5 at Kakinada, Guntur, Tirunelveli and Tuticorin respectively. This abnormal rise in prices has been in sympathy with the general inflation in the country.

Bombay.—Table No. 27 below shows the average annual wholesale prices of dry chillies at Byadgi, Bijapur, Jalgaon, Sholapur and Bombay markets in the Bombay State, during the years, 1941-50. (See Appendix No. XXII for the first four markets).

TABLE NO. 27

Average annual wholesale prices of dry chillies in the Bombay State.

(In rupees and annas per maund of 82 2/7 lb.)

Year	MARKETS				
	Byadgi	Bijapur	Jalgaon	Sholapur	Bombay
	Rs. As.	Rs. As.	Rs. As.	Rs. As.	Rs. As.
1941	7 11	N. A.	20 7	8 13	N. A.
1942	13 6	N. A.	31 5	15 4	19 3
1943	25 15	33 6	30 6	38 13	30 8
1944	23 10	19 6	25 7	27 6	28 2
1945	33 10	26 3	38 0	34 11	37 9
1946	62 7	58 15	53 3	66 14	56 15
1947	53 13	45 3	42 15	54 15	50 9
1948	43 2	46 13	43 4	46 15	40 2
1949	54 12	54 9	53 6	56 2	55 9
1950	67 8	68 1	65 11	62 11	63 3

N.A. —Not available.

It will be observed that there was a general rise in price in the year 1942. It was mainly due to the effect of war and also because of heavy exports. The prices continued rising in the year 1943, but received a set-back in the following year on account of restrictions on the movement of chillies to and from different States. The relief to the consuming public, however, was of a short duration and the inflationary spiral continued its course in the years 1945 and 1946, when exports were permitted again. There was a welcome decline in prices in the years 1947 and 1948, though they were still at a much higher level than in the pre-war years. Taking the average annual prices in 1941 as 100, the price index in 1950, at Byadgi and Jalgaon was 878.0 and 321.4 respectively. At Sholapur, the prices in 1950, were 611.3 per cent higher than in the year 1941. At Bijapur, the prices rose by 103.9 per cent during the year 1943 to 1950. At Bombay the prices in 1950 were 229.3 per cent higher than in the year 1942.

Madhya Pradesh.—Table No. 28 below based on Appendix No. XXIII shows the average annual wholesale prices of dry chillies at Malkapur, Amravati, Nagpur and Jabalpur markets in Madhya Pradesh during the years 1943-50.

TABLE NO. 28

Average annual wholesale prices of dry chillies in Madhya Pradesh.

(In rupees and annas per maund of 82 2|7 lb.)

Year	MARKETS							
	Malkapur		Amravati		Nagpur		Jabalpur	
	Rs.	As.	Rs.	As.	Rs.	As.	Rs.	As.
1943	27	2	37	0	32	13	39	3
1944	25	13	22	14	26	7	39	0
1945	36	4	32	10	35	11	40	15
1946	59	15	49	1	56	9	60	4
1947	49	2	40	3	45	5	57	11
1948	44	8	43	13	53	13	58	1
1949	69	3	69	10	71	8	97	5
1950	71	7	77	7	82	15	115	13

The movements of prices in the markets of Madhya Pradesh during the years, 1943-50, were similar to those in the Madras and Bombay States, in that there was a fall in the year 1944, followed by a steep rise in 1945 and 1946, succeeded by a drop in 1947. Thereafter, generally, the prices have been rising continuously. The prices at Malkapur, Amravati, Nagpur and Jabalpur in 1950, were higher by 163.4, 109.3, 152.8 and 195.5 per cent respectively than those in 1943.

Bihar.—Table No. 29 below based on Appendix No. XXIV shows the average annual wholesale prices of dry chillies at Patna, Mokameh, Barh and Pusa Road in Bihar, during the years, 1941-50.

TABLE NO. 29

Average annual wholesale prices of dry chillies in Bihar

(In rupees and annas per maund of 82 2|7 lb.)

Year	MARKETS							
	Patna		Mokameh		Barh		Pusa Road	
	Rs.	As.	Rs.	As.	Rs.	As.	Rs	As.
1941	9	4	10	11	10	9	N.	A.
1942	9	5	16	4	16	7	N.	A.
1943	28	12	25	8	26	3	23	8
1944	23	6	20	6	19	11	18	4
1945	27	11	29	3	28	6	20	3
1946	51	0	50	11	50	1	43	10
1947	39	8	38	10	36	7	38	3
1948	38	1	38	12	36	8	35	14
1949	83	2	74	1	74	12	72	0
1950	104	0	96	10	96	1	85	11

N.A.—Not available

The movements of prices in Bihar have been almost alike those in the Madras and Bombay States. They were quite low in 1941, but improved appreciably in 1942 and 1943.

As in the rest of the country, the prices receded to a certain extent in 1944, due to restriction on movements of dry chillies. In the year 1945, the upward move started again followed by an abrupt rise in 1946. The prices declined appreciably in 1947. The level of prices in the year 1948 was almost the same as in 1947. An important cause of this recession was the partition of the country and subsequent abnormal conditions which had an unsettling effect on the trade. In spite, of that, however the prices in 1947 and 1948 were very high as compared with those in 1941. In the following years the upward movement was resumed with great vigour. Taking the prices in 1941 as 100 the price index in 1950 at Patna, Mokameh and Barh was 1124.3, 904.1 and 909.5 respectively. Prices at Pusa Road in 1950 were 264.4 per cent higher than those in 1943.

Uttar Pradesh.—The following statement in Table No. 30 based on Appendices No. XIV and XV shows the average annual wholesale prices of dry chillies (Patna variety) at Kanpur and Lucknow markets during the years 1942-50.

TABLE NO. 30

Average annual wholesale prices of dry chillies in Uttar Pradesh

(In rupees and annas per maund of 82 2|7 lb.)

Year	MARKETS	
	Kanpur	Lucknow
	Rs. As.	Rs. As.
1942	25 15	26 13
1943	32 11	33 15
1944	42 9	43 9
1945	49 3	48 15
1946	50 3	49 1
1947	47 12	49 13
1948	57 4	59 7
1949	76 3	78 7
1950	85 15	87 8

The prices in the markets of Uttar Pradesh rose steadily except for a slight set-back at Kanpur in 1947. The price level at Kanpur and Lucknow in 1950 was higher than 1942 by 231.3 and 226.3 per cent respectively.

Punjab.—The average annual wholesale prices of dry chillies at Panipat, Moga and Ferozepur markets, in the Punjab, during the years, 1943-50, are given below in Table No. 31. (See Appendix No. XXV).

TABLE NO. 31

Average annual wholesale prices of dry chillies in the Punjab.

(In rupees and annas per maund of 82 2|7 lb.)

Year	MARKETS					
	Panipat		Moga		Ferozepur	
	Rs.	As.	Rs.	As.	Rs.	As.
1943	18	15	22	7	26	7
1944	20	1	18	7	20	14
1945	N.	A.	33	1	34	1
1946	43	4	49	10	52	6
1947	41	3	44	8	45	8
1948	38	6	42	13	51	2
1949	64	3	79	11	77	9
1950	62	13	70	9	73	3

N.A.—Not available.

It will be observed that the price movements in the Punjab markets are more or less in conformity with the movements in the other States. Except for a set-back in 1944 the prices rose steadily reaching a high level in the year 1946. They declined in 1947 and 1948. The partition of the country caused dislocation in the trade and this had a depressing effect on the prices. Even so, the price level in 1947 and 1948 was higher than the preceding years except 1946. The prices rose to their highest level in 1949. There was a slight recession in 1950, but even then the prices in that year, at Panipat, Moga and Ferozepur were 131.6, 214.5 and 176.8 per cent higher than in 1943.

Orissa.—The average annual wholesale prices of dry chillies at the Cuttack market in Orissa during the years 1941-50, are given below in Table No. 32. (See Appendix No. XXVI).

TABLE NO. 32

Average annual wholesale prices of dry chillies at Cuttack in Orissa

(In rupees and annas per maund of 82 2|7 lb.)

Year	Rs.	As.
1941	12	10
1942	19	9
1943	34	15
1944	39	1
1945	41	6
1946	46	8
1947	48	1
1948	43	14
1949	87	13
1950	100	14

It will be observed that prices have increased steadil throughout the period under review except for a slight brea in the year 1948. Taking the prices in 1941 as 100, the pric index in 1950 was 799.0.

West Bengal.—The average annual wholesale prices of dr chillies at Calcutta during the years 1943-50 are given belo in Table No. 33. (See Appendix No. XXVII).

TABLE NO. 33.

Average annual wholesale prices of dry chillies at Calcutta

(In rupees and annas per maund of 82 2|7 lb.)

Year	Patna variety.	
	Rs.	As.
1943	33	7
1944	28	1
1945	34	15
1946	59	13
1947	50	1
1948	50	0
1949	99	2
1950	118	4

It would be observed that the prices at Calcutta moved i conformity with the movement of prices at Patna in Bihar. Th causes of rise and fall in prices of this variety have already bee discussed under Bihar. The price level in 1950, was higher b 253.6 per cent as compared with the year 1943.

Hyderabad.—The following statement in Table No. 34, base on Appendix No. XXVIII shows the average annual wholesa prices of dry chillies at Hyderabad, Warangal and Nizamaba during the years, 1941-50.

TABLE NO. 34

Average annual wholesale prices of dry chillies in Hyderabad State

(In rupees and annas per maund of 82 2|7 lb.)

Year	MARKETS					
	Hyderabad		Warangal		Nizamaba	
	Rs.	As.	Rs.	As.	Rs.	As
1941	6	10	5	15	6	11
1942	12	9	11	6	13	5
1943	21	10	21	3	20	10
1944	11	11	13	5	10	4
1945	18	3	16	11	12	7
1946	52	11	51	5	43	10
1947	48	1	58	8	44	13
1948	27	6	19	5	21	3
1949	40	9	41	7	35	14
1950	89	14	85	4	75	5

The trend of prices in the Hyderabad State is similar to that of the Madras State. The prices were low in 1941. They rose steeply in 1942 and 1943, but declined in 1944, due to government control on the movement of chillies. The upward move started again in 1945 and continued up to the year 1950, except for a break in 1948. The prices in the year 1950 were 1256.6, 1335.8 and 1021.5 per cent higher than in 1941, at Hyderabad, Warangal and Nizamabad respectively.

Mysore.—The annual average wholesale prices of dry chillies at Bangalore City and Davangere markets in the Mysore State, during the years 1941-50, are given below in Table No. 35. (See Appendix No. XXIX).

TABLE NO. 35

Average annual wholesale prices of dry chillies in the Mysore State

(In rupees and annas per maund of 82 2|7 lb.)

Year	MARKETS	
	Bangalore City	Davangere
	Rs. As.	Rs. As.
1941	11 3	6 9
1942	17 2	13 8
1943	33 5	22 0
1944	38 1	15 7
1945	48 10	26 8
1946	55 14	61 15
1947	63 7	47 10
1948	46 5	33 5
1949	52 12	38 5
1950	73 15	79 7

It would be observed that the price movements at the Bangalore City market up to 1943, were similar to those of the markets in the Hyderabad State. The prices increased steadily in the following years also, reaching a high level in 1947. No recession in prices, however, occurred in 1944 and 1947. After receding in 1948, in sympathy with the general fall everywhere in the country, the prices went up again in the following years. The price movements in Davangere market, however, were more in line with the movements in the States of Hyderabad, Madras, etc. A recession in prices is noticeable in 1944, 1947 and 1948, as in most other markets. The prices at Bangalore and Davangere markets in 1950, were 560.9 and 1,110.5 per cent higher respectively, than in 1941.

From the foregoing discussion, it would be observed that on the whole, the prices were quite low in the year 1941.

Thereafter, they started rising and the increase was very mark in 1943. The prices received a set-back in 1944, due to restr tions imposed by the Government on the free movement chillies. But the upward move started again in 1945, and reach a high level in 1946, in most of the markets, while in others t increase in prices continued unabated even up to 1947. The was a general set-back in prices in the years 1947 and 1948, d to the partition of the country and subsequent unsettled con tions. The upward move started again in the year 1949 and t prices in the year 1950 were generally the highest recorde The rise in prices has been in sympathy with the gener inflationary conditions prevailing all over the country.

(*e*) *Price differences between old and new stocks* T stockists of chillies usually try to clear off the c stock before the produce of the new crop starts coming in they try to hold the latter till the old stock is sold out. Som times, however, small quantities of the old stock are left ov Chillies are generally stocked in gunny bags in ill-ventilat godowns and start deteriorating after a few months of storag The deterioration consists of dis colouration, loss of pungenc aroma, etc. Discoloured chillies may become whitish, blacki or brownish. If the produce is not properly dried before storag it is apt to become mouldy as well. On the other hand, chilli which have been stored for too long, become over-dried a break into bits even on slight handling. To avoid loss, son stockists mix the old stock with the fresh produce in sm quantities and thus dispose it of. Another way of getting r of old deteriorated stock is to prepare chilli powder from and mix it, if necessary, with the powder of fresh stock. The practices, however, are not desirable and are not followe generally. The difference between the prices of the fresh pr duce and the old stock depends upon the extent of deteriorati of the latter and the price of the old stock may be less tha that of the fresh produce by anything from 10 to 50 per cen In case of extreme deterioration the old stock has sometimes be sold at throw-away prices. As stated earlier, however, t stockists usually do not let the old stock overlap the fresh arriva and cases of extreme deterioration are rare.

(*f*) *Variation in prices of the same quality of produce at the sa time in different markets*: It is difficult to compare t prices of the same quality of produce in different marke at the same time as the prices are not quoted in r lation to any recognised standard grades. Another hand cap is the absence of reliable price data. The pric are invariably low in the producing areas and they i crease proportionately with the distance that the pr duce has to travel and the number of intermediari through whom it has to pass before reaching the co sumer. Other factors which affect the prices in differe markets are the transport facilities. Market charges a different in different markets, and in consequence, the increa

ver the initial prices varies accordingly. A few instances will ndicate in a general way, the comparative prices of the same uality of produce at different markets at the same time.

Average wholesale prices of dried chillies of *Gaorani* variety roduced in the Madhya Pradesh, for the week ending the 25th anuary, 1947, at a few important markets in Madhya Pradesh re given below in Table No. 36.

TABLE NO. 36

Average wholesale prices of dry chillies on 25-1-1947 *at some important markets in Madhya Pradesh.*

	Rs.	
Nagpur	60	per maund of 82 2/7 lb.
Chanda	63	" " "
Amravati	55	" " "
Akola	55	" " "
Malkapur	53	" " "

The prices were the highest at Chanda and Nagpur, two mportant consuming markets. They were comparatively low t Amravati and Akola. The price quotation at Malkapur, one f the most important chilli producing areas in Madhya Pradesh, as the lowest.

The following statement in Table No. 37 shows the average holesale prices of green *Nakli Patna* variety of chillies and *hotaphal* chillies (produced in the Punjab) at Gharunda, Murthal nd Panipat markets, in the Punjab, during January, 1947.

TABLE NO. 37

Average wholesale prices of green chillies in January 1947 *at some markets in the Punjab.*

(In rupees and annas per maund of 82 2/7 lb.)

Market	VARIETY	
	Nakli Patna	Chotaphal.
	Rs. As.	Rs. As.
Gharunda	12 5	10 12
Murthal	14 13	—
Panipat	—	12 15

It would be observed that *Nakli Patna* was quoted at a gher rate at Murthal than at Gharunda and Similarly *Chotaphal* as cheaper at Gharunda than at Panipat. The difference is e to the fact that stockists at Murthal and Panipat markets e reported to take extra care in handling and drying the pro- ce than those at Gharunda market. This naturally increases e cost as well as improves the quality and demand of the oduce.

The following statement in Table No. 38, shows the average holesale prices of dried chillies of different varieties at Raichur, arangal, Dharmabad, Nizamabad and Hyderabad markets in e Hyderabad State, during the month of November, 1946.

TABLE NO. 38

Average wholesale prices of dry chillies in November, 1946, at some markets in the Hyderabad State.

(In rupees and annas per maund of 82 2/7 lb.)

Market	VARIETY		
	Warangal	Dharmabadi	Nizamabad
	Rs. As.	Rs. As.	Rs. As.
Raichur	60 4	60 0	—
Warangal	50 15	—	—
Dharmabad	—	29 9	—
Nizamabad	—	—	49 4
Hyderabad	—	—	55 14

It will be observed that prices of both the *Warangal* an *Dharmabadi* chillies are higher at Raichur than at Waranga and Dharmabad respectively The reason for this is tha Warangal and Dharmabad are the producing areas while Raichu is the consuming centre. Similarly the prices of the chilli produced at Nizamabad were higher by Rs. 6-10-0 per maun at Hyderabad than in the former place.

The above examples clearly bring out the price differenc in the producing and consuming markets. The difference ar the causes thereof vary at different places. At one place it ma be due to extra cost of transport, at another due to extra handlin and excessive market charges, etc.

(g) *Retail prices and margin between wholesale and ret prices in some principal markets.*— Reliable data on retail prices chillies are not available. The retailers do not keep any reco of retail prices, because the quantity sold at a time is general too small to justify the maintenance of record. Moreover, they deal in many commodities of varied nature, it is co sidered well nigh impossible to maintain detailed records sale. No set principle is followed in fixing the retail prices a the retailers usually charge what they can. The most importa factor, however, is the purchase price of the retailer, who adjus his price not only according to supply and demand but al according to the quality of the produce. The retailers have al to make allowances for deterioration and other factors like t rent of the shop, etc. They try to keep the margin of pro as wide as possible to earn good returns. Retail prices va quite often in the same market or town depending upon local and clientele. Under the circumstances explained above, it difficult to make a valid comparison between wholesale a retail prices.

Some Municipal Committees and Cantonment Boards record retail prices but the method adopted to collect the inf mation is usually defective, and as such, not reliable. The bodies actually fix maximum retail prices for shops situat

within the market premises for a week or a fortnight in advance and the retailers are expected not to sell the produce above the fixed price. The prices so fixed are to be based on the prevailing prices but in actual practice are found to be much at variance with the day-to-day prices. They merely serve the public as an indication of the general level of prices.

The retail prices usually move in sympathy with the wholesale prices but the rise and fall in the former is not always parallel to that of the latter. This is obviously due to the fact that the price statistics are not necessarily for the same variety and quality of the produce. Moreover, as already stated above, there are several factors independent of the wholesale prices, which are taken into account for fixing the retail prices. Some times it happens that the average retail prices are lower than the wholesale prices. This usually occurs when the retailers fearing a downward trend in the wholesale prices, try to dispose of their stock even at a loss. Sometimes the retailers are left with old stock while fresh produce arrives in the wholesale market. In such cases, the retailers have no option but to clear their existing stocks even at a loss. Very meagre information is available regarding the retail prices of green chillies and the position in respect of dry chillies is also not quite satisfactory. However, the available information is discussed below :

(*i*) *Green chillies.*—The range of variation in the wholesale and retail prices is very wide in the case of green chillies. This is due to the fact that supplies depend upon daily arrivals which are directly affected by factors such as weather conditions, transport facilities and season. The following statement in Table No. 39 based on Appendix No. XXX, shows the percentage difference between average monthly wholesale and retail prices of green chillies at the Bombay City, during the year 1950.

TABLE NO. 39

Percentage difference between average wholesale and retail prices of green chillies at Bombay City in the Bombay State during the year, 1950.

Month	Percentage difference
January	97.6
February	—
March	—
April	92.7
May	133.0
June	207.7
July	136.9
August	126.0
September	56.5
October	51.0
November	60.6
December	46.9
Average	91.7

It will be observed that the percentage difference betwe the average wholesale and retail prices at Bombay varies fro 46.9 to 207.7. The percentage difference is highest in June. T highest average retail prices, are also quoted in the same mont The retail prices are on a high level from June to August wh the supplies are short. The retail prices are at a low level fro September to December. The retail prices move in sympath with the wholesale prices but the increase or decrease is not parallel lines.

The average monthly retail prices of green chillies and t margin between their wholesale and retail prices at Nagpur, Madhya Pradesh, during the year 1950 are given in Append No. XXXI and summarised below in Table No. 40.

TABLE NO. 40

Percentage difference between average wholesale and retail prices of gre chillies at Nagpur in Madhya Pradesh during the year, 1950.

Month	Percentage differenc
January	40.6
February	40.6
March	25.0
April	11.9
May	50.0
June	45.5
July	33.3
August	25.0
September	50.0
October	66.4
November	50.0
December	50.2
Average	38.4

It will be observed that the percentage difference varie from 11.9 to 66.4, the average being 38.4. The highest reta as well as wholesale prices are quoted in May while the lowes quotations in both cases are in October. The price level is hig from April to June and low from September to November. I short, the retail prices usually follow the same trend as th wholesale prices, but the movements, up or down, are mor marked in the case of the former.

The average monthly retail prices of *Desi* (indigenous) an *Sagia* varieties of green chillies at Lucknow and *Gorakhpu* chillies at Banaras in Uttar Pradesh and the margin betwee

heir wholesale and retail prices during the year 1950, are given n Appendix No. XXXII and summarised below in Table No. 41.

TABLE NO. 41

Percentage difference between average wholesale and retail prices of green chillies at Lucknow and Banaras in Uttar Pradesh, during the year, 1950.

Month	MARKETS			
	Lucknow			Banaras
	Variety	Desi	Sagia	Gorakhpuri
January	..	42.9	—	78.6
February	..	38.9	—	66.7
March	..	45.8	—	33.3
April	..	25.0	—	—
May	..	18.8	—	—
June	..	27.9	—	—
July	..	25.0	28.6	—
August	..	34.6	33.3	—
September	..	52.2	42.9	—
October	..	50.0	28.2	—
November	..	56.3	—	—
December	..	66.7	—	76.5
Average	..	35.9	32.8	63.8

It will be observed that the range of variation in the percentage difference of *Sagia* variety is not very wide, the reason being that its period of supply is short. In the case of *Desi* chillies at Lucknow, the percentage difference varies from 18.8 to 66.7. The highest average wholesale and retail prices are quoted in June. The lowest wholesale prices are recorded in December, while the retail prices are at their lowest in December and January. *Gorakhpuri* chillies are available at Banaras from December to March. The percentage difference in the wholesale and retail prices varies from 33.3 to 78.6. As stated earlier, the retail prices move in sympathy with the wholesale prices but the fluctuations are sharper in the case of the former and at times even against the trend of wholesale prices.

Table No. 42 below, based on Appendix No. XXXIII shows the percentage difference between average monthly wholesale and retail prices of green chillies at Calcutta, during the year 1950.

TABLE NO. 42

Percentage difference between average wholesale and retail prices of green chillies at Calcutta during the year 1950.

Month	Percentage differenc
January	20.0
February	25.0
March	20.0
April	20.0
May	33.3
June	50.0
July	20.0
August	42.9
September	20.0
October	25.0
November	20.0
December	50.0
Average	27.3

It will be observed that the percentage difference ranges fro 20.0 to 50.0, the average being 27.3. The maximum percentag difference is in the months of June and December. The move ments of prices in Calcutta are very irregular, depending upon th arrivals on different days. Moreover, in view of the inflationar conditions, the usual factors affecting prices do not play the full part. The highest prices are recorded in the months March and September. The retail prices move more or les on the same lines as the wholesale prices.

(*ii*) *Dry chillies.*— The range of difference between th wholesale and retail prices of dry chillies is not as wide as green chillies. The prices of dry chillies are not prone to sudde and abnormal fluctuations for the simple reason that the supplie are more or less regulated throughout the year. As stated earlie reliable information on retail prices is not readily forthcomin Available information is discussed below :

Madras.—Appendix No. XXXIV shows average monthly r tail prices of dry chillies at Virudhunagar market in the Madra State, during the year 1950, and the margin between the whol sale and retail prices. Table No. 43 below based on that appendi shows the percentage difference between the wholesale and reta prices.

TABLE NO. 43

Percentage difference between average wholesale and retail prices of dry chillies at Virudhunagar in the Madras State, during the year 1950.

Month	Percentage difference.
January	8.8
February	8.4
March	9.2
April	11.1
May	13.2
June	7.9
July	9.1
August	7.1
September	12.9
October	9.1
November	10.6
December	9.6
Average	9.7

It will be observed that the percentage difference at Virudhunagar varies between 7.1 and 13.2, the average being 9.7. Appendix No. XXXIV shows that though on the whole the retail prices move in sympathy with the wholesale prices, the rise and fall in the former is not always parallel to that in the latter. The minimum and maximum average wholesale prices are quoted in March and August respectively. The percentage difference, however, is the lowest in August and highest in May, when the prices are comparatively low. The reason is that when the wholesale prices are at a very high level, the retailer's margin comparatively narrow but when the wholesale prices fall down precipitately, the retailers still try to maintain as high a level of retail prices as possible. The retail prices do decline in sympathy with the wholesale prices but the rate of decline is comaratively slow.

Bombay.—The following Table No. 44 based on Appendix No. XXXV shows the percentage difference between average monthly wholesale and retail prices of dry chillies at Bombay and Jalgaon markets during the year, 1950.

TABLE NO. 44

Percentage difference between average wholesale and retail prices or dry chillies at Bombay and Jalgaon in the Bombay State during the year 1950.

Month	MARKETE	
	Bombay	Jalgaon
	Percentage difference	Percentage difference
January	26.3	51.2
February	5.4	54.2
March	6.1	49.2
April	5.9	39.7
May	15.4	57.3
June	37.6	48.3
July	31.8	73.6
August	43.9	38.9
September	49.3	43.4
October	43.8	36.3
November	32.4	43.4
December	23.4	63.7
Average	26.0	49.5

It will be observed that the percentage difference varies from 5.4 to 49.3 at Bombay and 36.3 to 73.6 at Jalgaon. At Bombay the maximum wholesale prices are quoted in April, while the retail prices are at their highest level in September. Lowest wholesale, as well as, retail prices are recorded in January. At Jalgaon maximum wholesale and retail prices are quoted in August and July respectively. Minimum wholesale prices are recorded from January to March and again in May, while the retail prices are at their lowest level in March. Percentage difference is at its maximum in September, at Bombay, and in July at Jalgaon. In short, the retail prices do not strictly follow the movements of the wholesale prices.

Madhya Pradesh.— The average monthly retail prices of dry chillies and the margin between their wholesale and retail prices at Malkapur and Nagpur during the year 1950 are given in Appendix No. XXXVI and summarised below in Table No. 45.

TABLE NO. 45

Percentage difference between average wholesale and retail prices of dry chillies at Malkapur and Nagpur in Madhya Pradesh, during the year, 1950.

Month	MARKETS	
	Malkapur Percentage difference	Nagpur. Percentage difference.
January	6.7	6.0
February	3.2	9.1
March	33.3	9.1
April	8.3	12.5
May	8.3	12.5
June	8.3	26.3
July	8.3	22.2
August	6.7	12.9
September	6.7	12.5
October	6.7	12.5
November	11.1	12.5
December	11.1	17.6
Average	9.6	14.2

It will be observed that at Malkapur, the percentage difference ranges from 3.2 to 33.3 and at Nagpur from 6.0 to 26.3 A perusal of Appendix No. XXXVI shows that on the whole the retail prices move in sympathy with the wholesale prices but at times they diverge sharply from the latter.

Uttar Pradesh.—The average monthly retail prices of dry chillies and the margin between their wholesale and retail prices at Kanpur and Lucknow, during the year 1950 are given in Appendix No. XXXVII. Percentage differences based on that appendix are given below in Table No. 46.

TABLE NO. 46

Percentage difference between average wholsale and retail prices of dry chillies at Kanpur and Lucknow in Uttar Pradesh during the year, 1950.

Months	MARKETS			
	Kanpur		Lucknow	
	Variety Patna	Patiala	Patna	Kashipur
January	24.6	29.4	13.6	25.0
February	17.6	34.6	17.6	29.4
March	41.0	33.3	25.0	27.9
April	33.3	25.0	25.0	36.4
May	41.0	33.3	22.0	33.3
June	37.5	41.0	17.6	33.3
July	29.4	37.5	11.1	25.0
August	25.0	29.4	30.4	25.0
September	33.3	36.4	30.4	25.0
October	26.3	33.3	27.7	28.2
November	20.0	26.3	30.4	42.9
December	33.3	33.3	33.3	33.3
Average	30.0	32.7	23.8	30.2

It will be observed that percentage difference varies fro 17.6 to 41.0 and 25.0 to 41.0 in the case of *Patna* and *Patiala* chilli respectively at Kanpur. At Lucknow the range of percenta difference is from 11.1 to 33.3 and 25.0 to 42.9 for *Patna* a *Kashipur* chillies respectively. The retail and wholesale pric move, more or less, in sympathy with each other at both t markets, though the rise and fall are not always parallel. Kanpur, *Patna* chillies fetch the lowest wholesale prices in Ap while the retail prices are at their lowest in February and aga in April. The maximum wholesale prices are recorded in Nove ber while the retail prices are at their highest level from Se tember to December. The position in regard to the *Patiala* varie of chillies is, more or less, similar to that of the *Patna* variety.

At Lucknow, the wholesale prices of *Patna* chillies are their lowest level in March-April and at their highest in Octob The retail prices on the other hand maintain a low level fr January to July and are high from August to December. Th the retail prices do not move up and down in conformity wi the wholesale prices. In the case of *Kashipur* chillies, the low wholesale prices are quoted in November, while the retail pric are at their lowest level from September to January. High

holesale prices are recorded in May and June, while the retail rices are at their highest from April to June.

West Bengal.— Appendix No. XXXVIII shows the average onthly retail prices of dry chillies at Calcutta, during the year, 950, and the margin between the wholesale and retail prices. able No. 47 below based on Appendix No. XXXVIII shows the ercentage difference between the wholesale and retail prices.

TABLE NO. 47

Percentage difference between average wholesale and retail prices of dry chillies at Calcutta, during the year, 1950.

Month	Percentage difference
January	14.0
February	13.2
March	10.5
April	8.3
May	12.3
June	13.8
July	8.1
August	14.3
September	13.0
October	9.1
November	28.6
December	27.2
Average	13.8

It will be observed that the percentage difference ranges rom 8.1 to 28.6, the average difference being 13.8. The wholesale rices varied between Rs. 84-8-0, and Rs. 137-8-0 per maund, the owest being in December, and the highest in October. The retail rices did not move up in sympathy with the wholesale prices n July and October. While the latter fell sharply in November y Rs. 32-8-0 per maund, the fall in retail prices was compara-ively much lower, being only Rs. 15 per maund. In December, owever, the fall in retail prices was comparatively higher than n wholesale prices. Generally retail prices were steadier than wholesale prices.

Hyderabad.— The following statement in Table No. 48 based n Appendix No. XXXIX shows the percentage difference be-ween the average monthly wholesale and retail prices of *Dharmabadi* and *Jowari* chillies at Raichur, during the year, 1950.

TABLE NO. 48

Percentage difference between average wholesale and retail prices of dry chillies at Raichur in the Hyderabad State, during the year, 1950.

Months	VARIETY	
	Dharmabadi Percentage difference	Jowari Percentage difference
January	25.8	32.5
February	34.8	40.8
March	9.2	11.7
April	19.3	24.8
May	23.1	28.0
June	23.7	28.9
July	22.3	37.2
August	39.7	60.0
September	41.4	45.4
October	56.8	39.2
November	32.3	8.5
December	—	16.5
Average	30.6	32.7

As will be seen from the above statement, the percentage difference in the case of *Dharmabadi* chillies ranges from 9.2 to 56.8, while for *Jowari* chillies the range is from 8.5 to 60.0 The highest wholesale prices for *Dharmabadi* chillies are quoted in August, while the retail prices are at their highest level in August-September. The minimum wholesale as well as retail prices are recorded in January. In the case of *Jowari* chillies also, the position is, more or less, the same as in the case of *Dharmabadi* chillies, except that the highest wholesale prices are quoted in September, while the lowest retail prices are recorded in November.

Mysore.—The average monthly retail prices of dry chillies and the margin between their wholesale and retail prices at Bangalore market in the year 1950, are given in Appendix No. XI and summarised below in Table No. 49.

TABLE NO. 49

Percentage difference between average monthly wholesale and retail prices of dry chillies at Bangalore in the Mysore State during the year, 1950.

Months	Percentage difference
January	43.6
February	45.9
March	25.2
April	61.2
May	23.8
June	18.7
July	32.7
August	37.7
September	27.3
October	35.8
November	55.6
December	40.1
Average	36.0

It will be observed that the percentage difference between ıe average wholesale and retail prices of dry chillies at angalore ranges from 18.7 to 61.2. The maximum average holesale and retail prices are recorded in October. The lowest holesale prices are quoted in January, while the retail prices uch their lowest point in March.

From the foregoing discussion, it will be clear that although ıe retail prices generally move in sympathy with the whole-le prices, the rate of increase or decrease is not similar. sually, when the wholesale prices are at their highest, the tail prices are also at their peak but the margin of difference appreciably reduced. However, when the wholesale prices ll down precipitately, the retail prices go down only to a small xtent, with the result that the margin of difference is compara-vely much higher at such times.

Since retailers try to obtain the maximum prices irrespec-ve of the current wholesale prices, haggling is a common feature the retail trade. In order to enable the consumers to obtain eir requirements at the current market price it is essential at local bodies should fix maximum retail prices daily after king into account the wholesale prices and these prices should e exhibited at a prominent place in the markets under their ntrol.

(*h*) *Market intelligence, i.e., supply of information regarding arrivals, ocks, current prices, etc.* For efficient marketing of the agri-ltural produce, it is essential that both the seller and ıe buyers should have adequate information about the

arrivals, stocks and prices prevailing in different mar kets. But unfortunately there are very few markets i India, where systematic record of arrivals, stocks and price is maintained. In Madhya Pradesh, prices of chillies are broad cast daily from the All-India Radio station at Nagpur. In th Punjab, all the regulated markets are expected to maintain suc information but in actual fact it is seldom done. In the Hyder abad State, however, the regulated markets do record informa tion regarding arrivals, stocks and average monthly wholesal and retail prices. The market authorities also put up the dail highest and lowest prices on a notice board in the market. I other states, however, the position generally is far from sati factory and there is no organised system of market intelligenc

The producers are generally unaware of the current price or their trend in different markets, and have to depend for infor mation either on other producers, who have paid a visit to som nearby market or the village merchants or commission agent representatives, who visit the villages for making 'on the spot purchases. The former's information is usually out of dat while the latter do not give correct information as it goes agains their interests. The producers have no means of knowing th stock position in the markets or verifying the price quotation of the village merchants and other purchasers.

The Commission agents and wholesale merchants also hav no satisfactory means of keeping themselves informed of th latest stock and price position. They have to depend mainl on correspondence with their co-workers in other market Usually, letters are sent by the traders in the consuming market to the traders in the assembling and distributing markets inform ing them about the prices and asking for despatches. But th quotations are not binding on them and quite often they chang by the time the consignment arrives. Some of the commissio agents in important markets occasionally prepare a marke report, get it printed and circulate it amongst their regular cu tomers and dealers in consuming and distributing market These reports contain information on prices, arrivals, qualit of the produce, season and a short but general survey of th trade conditions in different markets. A translation of such circular issued by a firm at Panipat, in the Punjab, is given i Appendix No. XLI.

Some of the newspapers in the Bombay State have of la started publishing weekly wholesale prices of chillies produce in the Byadgi tract. Similarly a few vernacular newspapers i the Punjab occasionally publish prices of chillies along wit other commodities. A few newspapers in other States lik Orissa and Mysore also publish commodity prices includin chillies. The 'Calcutta Price Current and Money Marke Report' issued by the Bengal Chamber of Commerce contai information on the prices of chillies, but it is mainly for the us of shippers. Some municipalities like Calcutta, Bombay an

Bangalore publish retail prices of chillies along with the other agricultural produce for the benefit of the consumers. In Madhya Pradesh, the State Food Department and the Marketing Section have, of late, been collecting information on prices of chillies in important markets. The Food Department publishes a weekly price report in which prices of agricultural commodities including chillies are given. Similarly, in Orissa, the Supply and Transport Department publishes the wholesale prices of chillies in the principal markets of the State. In the Mysore State the Director of Industries and Commerce publishes monthly prices of chillies in the Official Gazette.

The drawback in all the publications referred to above is that no mention is made of stocks or trend of the market. Further, these bulletins are published too late to be of any use to the growers or exporters in the producing areas. To enable the producers to bargain for the market value for their produce, it is necessary that they should be posted with the latest information regarding prices and stock position in different markets. The quickest means of doing so is the radio. Several stations of the All-India Radio, such as Jullundur, Mysore, Cuttack, Hyderabad etc., broadcast prices of important agricultural commodities including chillies. The All-India Radio should, however, arrange to include not only prices but information on stocks and arrivals also in its regular broadcast of prices of important agricultural commodities and for the information to reach the cultivators, it is necessary that there should be a net-work of village receiving sets. Dissemination of news by radio should be supplemented by other means such as the posting of such information prominently in markets, courts, district or union board offices, post offices, etc. The newspapers can also be very helpful in the dissemination of such news.

It is desirable that information regarding prices and stocks position should be collected by special agency. Wherever, regulated markets exist, the information could be collected by the Marketing Inspector, who should despatch the data expditiously to the State and Central Marketing Organisations, which in turn, should arrange for the dissemination of the same on the State and All-India scale respectively. In places where regulated markets do not exist, alternative arrangements should be made for supplying the information to the State and Central Marketing Organisation.

CHAPTER IV PREPARATION FOR THE MARKET

A.—HARVESTING AND DRYING-COSTS

All the chillies on the plants in a field do r ripen simultaneously. It may take from 3 to 10 pickings harvest the crop completely depending on the climatic con tions, variety, condition of the crop, irrigation facilities, e Unirrigated crop matures earlier but yields less and may completely harvested in 3 or 4 pickings, whereas the irriga crop has a season of longer duration and up to 10 pickings m be necessary to collect the whole crop.

Chillies required in green condition for use in *chu* pickle and vegetable preparations are usually picked when s green but fully developed in size. For dry chillies, howev picking starts when they have acquired the characteristic r or yellow colour. It is only the fully matured chillies, wh retain good colour and flavour on drying. Some producers p either slightly unripe chillies or just as they attain the char teristic colour to get a heavier out-turn, but either practice resu in a discoloured produce of inferior keeping quality. Moreov the loss on drying in this case is comparatively high. At certa places, such as Dharwar district in the Bombay State and the Hyderabad State, chillies are allowed to remain on t plants till they get semi-dried before being picked. It is claim that the produce in this case develops superior colour, flavo and keeping quality. The out-turn, however, is comparative less in this case.

The next important step after picking chillies is to d them. In some producing areas like Madhya Pradesh and t Punjab, the producers usually do not attend to drying of chilli Generally, they cart the produce to the market for sale, as so as possible, after each picking. In the Bombay State, the pr ducers in different tracts have different modes of disposing the produce. Some dry it completely, while others sell it wit out drying as in the Punjab. In the other States, generally t producers dry their produce themselves.

Chillies are thinly spread out for drying on dry, flat a level ground or roof, which may be bare or covered with ma and even nets, according to the local custom. In the sout eastern part of the Punjab, however, special plots of land, slight higher in level than the surrounding area are reserved for dryi chillies. These plots are generally situated near the marke and are known as "Tibi" in local parlance. Sandy plots a preferred since they get heated quickly by the sun and hast the process of drying. At dusk the chillies are heaped up a

roperly covered or taken indoors, if there is a danger of dew alling during the night. The dew has a deteriorating effect n the produce as it introduces extra moisture into it. Next norning the produce is spread out again. This goes on till the hillies are fully dried. If there is no dew then the produce is eft to dry undisturbed for 3 or 4 days. Thereafter, the chillies re turned over daily till fully dried. The drying process may ake anything from 3 to 15 days depending upon the maturity of ne crop and the intensity of the sunshine.

In the Madras State, sometimes the ripe chillies are steamed n a big vessel for about five minutes before being laid out for rying. This is said to help in the retention of calyx and in iving fast colour to the finished product. The retention of alyx prevents the seed from falling out when the produce is acked or sent out. This method, however, is not common. n certain States like Madhya Pradesh and certain parts of the unjab and Mysore, chillies are trampled upon lightly when rying, to flatten them up. This method has two advantages, in hat the finished product requires less packing space and the hances of seed falling out in transit and handling are reduced. n some tracts of Jullundur and Amritsar districts in the Punjab, here is a practice of cutting away the stalks of chillies. About 0 to 40 per cent of the produce of these areas is subjected to his process and the stalkless produce is known as *"Dandi-cut"* he stalks are removed with the help of scissors either before r just after drying. Care is taken to see that the base of the talk remains intact as otherwise the seeds are apt to fall out. During the course of stalk cutting, spotted and immature chillies re also removed. Such *"dandi-cut"* produce, therefore, sells t a premium of Rs. 10 to Rs. 20 per maund over the ordinary roduce.

If all the chillies in a particular lot have not fully developed ne characteristic colour before being laid out for drying, it is common practice to heap them up, till the whole lot attains niform colour. Thereafter, they are spread out for drying. In ertain areas in the Mysore State, the chillies are smeared with oist red earth before being put out for drying. It is claimed hat by doing so, the drying process is hastened, and moreover, he finished product is smooth, *i.e.* unwrinkled. The earth is ubbed off after the chillies are dried. Further cleaning is done y sieving the stuff.

Picking and drying of chillies are generally attended to by embers of the producer's family. If, however, the area to be arvested is too large and the crop heavy, hired labour is engaged, hich usually consists of women-folk. The payment is generally ade in kind varying from 1/8th to 1/14th of the total quantity icked. The more luxuriant the crop, the less is the rate of ayment. Other factors which have a direct bearing on the ages are the prevailing prices and the availability of labour, tc. If the prices of chillies are high, the share of the picker is

proportionately reduced The cost of harvesting and dryin in terms of money in different states varied from about Rs. per maund in Uttar Pradesh to about Rs. 10 per maund in Madra in 1950.

B.—GRADING AND STANDARDISATION

(1) Classification

The producers do not practice classification of chillies. Sinc however, some particular varieties have become popular different areas, it is usually only these varieties which are pr duced there. As far as possible, the producers do not mix th produce of different varieties. Some of them sell the produc of different pickings as and when harvested. It is the usu custom to cull out white, discoloured and spoiled chillies durin the process of drying. The last picking which is general inferior in quality is not mixed with the earlier pickings.

The trade, however, generally classifies the produce in different qualities on the basis of variety, size, purity, et Generally, there are three qualities *viz.*, Nos. 1, 2 and 3. The fir quality consists of pure, unadulterated, completely dried produ of uniform colour. The second quality has about 25 per ce admixture of brown, yellowish and discoloured chillies. Th third quality has an adulteration of up to 50 per cent. Som times there is a class in between the first and second, know as 1-1|2 (*Dewra*). This quality contains pure red chillies whi may be slightly moist due to sprinkling of water and discolour chillies may also be present to a small extent. In differe markets, however, the percentage of adulteration varies accor ing to the prevalent customs.

There is, however, no official or trade sanction behind the classes. The inferior varieties, even though pure, are classifi into second and third qualities. In some markets the qualities a recognised by the thinness or thickness of the skin of chillie smoothness or otherwise of the skin, pungency, seed content, e For instance, chillies are divided into four classes in the Hyde abad State *viz.* (1) *Moti mirch* (long and broad) (2) *Bare mirch* (long and thin), (3) *Chhoti mirch* (small) and (4) *p* (mixed). In addition to the above-mentioned rough classific tions, the trade observes the following customs also. Old a new produce are generally stocked and sold separately. Effor are made to differentiate between thin and bold produce. Som times a particular market requires a particular blend. In th case the merchants in the distributing markets mix differe qualities or varieties in such a way as to get the required qual and blend.

(2) Quality factors

(*a*) *Colour.*—Colour of chillies is a very important factor determining the prices. The predominant colour is red, follow by orange and yellow Deep, brilliant red is the most favour

colour and dull whitish or pale chillies are not liked either by the trade or the consumers. The colour starts fading after prolonged storage. Rains also have a deteriorating effect upon the colour of the chillies. Moist chillies if stored in bags turn blackish while prolonged godown storage results in brownish or yellowish colour. Pale and discoloured chillies and the produce of inferior varieties are generally utilised for manufacturing chilli powder.

(*b*) *Size and shape.*—Chillies have varying sizes and shapes. There are long as as well as short and medium sized chillies. Similarly there are numerous shapes such as linear, round, oval, broad, etc. Different varieties have varying degrees of popularity in different areas. In so far as the utility is concerned, it is not the size and shape which count but purity, colour, pungency, seed content, etc.

(*c*) *Seed content.*—Varieties having more seed weigh more than those having less seed, volume for volume. The trade and the consumers generally prefer varieties having less seed. In certain markets, some deductions are mutually agreed upon if the chillies have comparatively more seed. Unbroken chillies with less seed and without loose seed are preferred. Chillies which are brittle and get broken during transit, allowing the seed to fall out, are always sold at a discount.

(*d*) *Pungency.*—Pungency is another very important factor in determining the quality and price of chillies. Except for the large fruited chillies variously known as Russian chillies, Spanish chillies, vegetable chillies, etc., and which are used as a vegetable, they are utilised mainly as a spice and as such pungency is a very important factor. Thin skinned chillies are generally very pungent and this quality decreases with the increase in the thickness of the skin. Immature chillies lose their pungency quickly on storage, while prolonged storage affects the pungency of ripe chillies as well. Insect pest and mould attack also affect this quality adversely.

(*e*) *Dirt and other foreign matter.*—As chillies are hand-picked individually and dried carefully, the chances of the presence of foreign matter and dirt are very small unless adulteration is done deliberately to increase the weight of a particular lot. Usually there is no dirt or foreign matter but broken stalks of chilli fruits, pieces of chilli fruits and loose seed are present. Some deductions are made in the prices if stalks, twigs, broken and loose seed are present in appreciable quantities. Deductions are also made if dirt is present.

(*f*) *Damage.*—Damage is caused in several ways to chillies. Premature dropping of chillies from the plants due to excessive cold, frost, heavy rain or irrigation causes damage. Such chillies spoil others also if mixed with them. Careless handling during harvesting, drying, packing and in transit also causes damage. Sprinkling water on stored chillies results in the production of

heat which in turn deteriorates their colour, causing them t turn blackish or brownish. Insect pests and fungal diseases ar the other causes of damage. The price of particular lots is settle after taking into consideration the proportion of damaged chillie to the whole lot. The growers as well as the traders, therefor usually remove damaged chillies before marketing the produc

(*g*) *Moisture content.*—Moisture content of the chillies ma vary from 5 to 60 per cent, according to the stage, up to whic they have been dried. If they are completely dried, they becom brittle and there is considerable breaking up of the produc during different processes of marketing. Hence ,it is a commo practice to sprinkle water on the produce before packing it fo transport or sale. If sprinkling is done judiciously, it does n harm but if unnecessary water is added, as is often done b unscrupulous growers and traders, it produces heat in the packe chillies and consequently causes deterioration in their colou Additional water is usually sprinkled to increase the weight o the consignment. The buyers are, therefore, naturally carefu in seeing that the stuff is thoroughly dried before they purcha it. Several methods are adopted to find out if the produce properly dried. A particular weight of chillies, say 5 seers, dried in the sun for a whole day. If the lot loses 2 to 2-1 *chhatanks* in weight, the produce is considered to be properl dried. A sample is pressed in hand. If on release of pressur it regains its original form, it is considered to be properly drie Moreover, in the case of fully dried chillies the seed falls dow if the fruits get broken. Properly dried chillies should produc a rattling sound, if shaken close to the ear. Presence of dar brown spots on otherwise bright coloured chillies indicates th rain had fallen on the produce in the course of drying. In few markets, it is a practice to dry the chillies for a day or tw before offering them for sale. The price is offered after takin into consideration the moisture content of the chillies.

(3) Grading practices

Grading of chillies with the specific object of conforming t any prescribed standards is not in vogue in India. The arm authorities have prescribed certain standards, called Army Se vice Corps Specifications, for the purchase of different commod ties for the use of defence personnel. The specifications drawn u for chillies are given in Appendix No. XLII. According to thes specifications the tendered stuff may be of any red variety wit stalks and without broken fruits, fit for human consumptio The chillies should be of the current season, of bright red colou and free from moulds, insects and foreign matter. Up to 10 per cent moisture, 5.0 per cent broken chillies and loose seed b weight and 2.0 per cent discoloured pods are allowed. It wi be observed that the specifications are based mainly on gener characteristics and purity, size, pungency, etc., are not insiste upon. Strictly speaking, therefore, chillies supplied under the specifications cannot be called "graded produce". So, in actu

Plate No. 19

Andkas (containers) used for packing Chillies in the Hyderabad State.

Plate No. 20

State for despatch at a Railway Station.

ractice, grading of chillies according to prescribed standards s not done. Sorting of different varieties by vision is, however, sually done almost everywhere. The prevalent practices are iscussed below :

(*i*) *By growers.*—The growers usually remove discoloured, amaged, immature and rotten chillies from the produce when rying it. They try to keep different varieties in separate lots. he last picking which generally consists of small sized shrunken hillies is almost invariably kept separate from the earlier ickings and is usually utilised in the grower's own household. ome growers go to the extent of marketing the produce of ach picking separately. Others, especially those, who are in eed of ready cash sell their produce without drying it. Sorting y size is not usually practised by the growers.

(*ii*) *By village merchants.*—These merchants do not do any rading. On the other hand, it is a common practice with them o mix inferior stuff with the produce of superior quality, in rder to pass off the adulterated lot as of good quality.

(*iii*) *By wholesale merchants and commission agents.*—The ctivities of wholesale merchants and commission agents usually verlap those of each other. In fact, in most of the cases, it is he same person doing both the jobs. A small percentage of hese merchants do not care to grade or sort out the produce nd sell it off in the condition in which it is received. Others ho have dealings with outside markets generally get damaged nd discoloured chillies removed. They resort to mixing different ualities and types to prepare the consignment according to the equirements of the buyer at the other end. Generally, however, the merchants recognise three or four qualities or grades made by visual inspection, as already mentioned, in the preceeding pages.

(*iv*) *By co-operative societies.*—Co-operative societiies dealing n this commodity do not practise any grading.

4. Containers

The most common container is the gunny bag. In some parts of the Bombay State, *Toddy mat* bundles are also used. In the Hyderabad State, the container most commonly used is *Andka.* It is made by rolling up a palm-leaf matting in a cylinderical form and sewing the top roll lengthwise with twine. The open ends are covered with dry grass and sack cloth of paddy straw or palm-leaf netting and the whole package is tied round with thick rope. (See plate Nos. 19 and 20 facing this page). When large quantities of chillies are to be stored, they may be heaped loose in a dry, well-ventilated godown, but when they are to be sent out, gunny bags are invariably utilised for packing them. As stated above, it is a common practice to sprinkle water on chillies before packing them, to decrease breakage during transit. Many a time they are brought loose

in carts, which are lined with gunny cloth. Fresh ripe chill
are brought into the market in gunny bags, wicker baskets, spl
bamboo baskets, etc. However, the most common container f
them also is the gunny bag.

(5) Possibilities of adopting standard grades and containers.

There is a possibility of adopting standard grades f
important commercial varieties of chillies based on size, colou
moisture content, dirt and damage. Pungency will, of cour
vary with each variety. The standardisation of containers is
natural corollary to grading. Gunny bag is the container m
commonly used and it is also the cheapest. It can be conve
ently standardised for packing a particular quantity of chilli
The only drawback in the use of gunny bags is the greater chan
of breakage of chilli fruits during transit. It should be possib
to reduce the incidence of breakage by encouraging the practi
of flattening the chillies by trampling lightly upon them duri
the drying process and also by judicious moistening of the chilli
at the time of packing. The possibilities of adopting standa
sized baskets also need to be explored, as they too are general
cheap.

CHAPTER V. ASSEMBLING

METHODS OF ASSEMBLING

(*a*) *By producers.*—Generally the producers have a desire o assemble and market their own produce but need of ready ash, small marketable surplus, unsatisfactory means of trans- ort and complicated market practices often compel them to art with their produce to the village merchants and other uyers. Not unoften, the growers are indebted to village mer- hants or commission agents and are, therefore, more or less ound to sell the produce to them. Quite a fair proportion, owever, is assembled and sold by the producers themselves in ome of the States.

In the Madras State, small producers carry the produce to ie nearest weekly *shandy* (market) for sale. If large quantities. re involved, they are transported in carts to the nearest town arket and disposed of by auction or through the good offices f wholesalers. In the Bombay State, 40 to 75 per cent of the arketable surplus in different areas is assembled and brought o the market by the producers themselves. In Madhya Pradesh, he quantity assembled by the producers is estimated to be about 0 per cent of the total crop. In Bihar, generally the producers o not assemble the produce. They carry it to their homes, rom where it is collected in fresh condition by the village mer- hants or agents of wholesale merchants. In the Punjab also, he growers generally dispose of the chillies before drying them. he drying is attended to either by the village merchants or y traders in the assembling markets depending upon the pre- ailing practice of sale in the producing area. In the Punjab, he producers carry the undried produce to the assembling narket. In a very few cases the standing crop is sold out to ocal merchants but this is uncommon. In Assam, also the pro- ucers assemble most of the crop themselves and sell it in the weekly markets or town markets direct to the consumers, while ome of them sell a part of the produce to the wholesalers. In Orissa, chilli is a minor crop. Most of the producers sell chillies n the village *hats* along with other vegetables and fruits. Some illagers purchase small quantities of chillies from their neigh- ours, and then dispose of the quantity thus assembled, in the vil- ge *hats*. These transactions, however, are mainly in green hillies. In the West Bengal, however, the quantity handled by he producers is comparatively small and except for the producers iving in close vicinity of the markets, the others dispose of the roduce to the village merchants. In the Hyderabad State, the roducers generally sell off the produce immediately after harvest to the village merchants or through the commission agents in the wholesale markets. They are usually indebted either to the village merchants or the commission agents, and thus are

practically bound to sell their produce to or through them. I the Mysore State, the producers assemble only a small propo tion of the marketable surplus and carry it to the market for sal More or less, the same conditions as described above, preva in other states also.

(*b*) *By village merchants.*—The village merchants are a important factor in the assembling of chillies. They are four in all the chilli producing areas acting on their own or on beha of wholesale merchants and commission agents. They may b wholesale merchants' relatives or paid employees as in th Bombay State. Village merchants generally practice adulter tion and do a lot of mixing of the produce of different qualiti with the intention of getting higher returns for comparativel inferior stuff. In the Madras State, the village merchants colle a fair proportion of the produce from the drying yards or eve from the producers' homes and dispose of a portion of it at th weekly *shandies*. The balance is carried to the assemblin markets and sold to the wholesalers. In case, they are represent tives of the wholesalers, then the quantity collected by them delivered to the wholesalers for disposal. In the Bombay Sta the village merchants are responsible for assembling 30 to 5 per cent of the marketable surplus but a majority of them a on behalf of the wholesale merchants as they themselves lac the resources to do the business. They move from village t village to collect the produce and even buy fresh ripe chilli and dry them before disposal. In Madhya Pradesh, the villag merchants assemble about a third of the produce for sale. I Bihar, the village merchants go about the producing areas an collect freshly harvested chillies. Itinerant merchants also d this work in Bihar and purchase chillies direct from the produce or even from the village merchants. After drying the produc the village merchants or the itinerant merchants, as the cas may be, carry the produce to the assembling or distributin markets for disposal. The position in the Punjab is similar t that in Bihar. The village merchants or other traders purcha the produce and attend to its drying and subsequent sale. I Assam and Orissa the village merchants play an insignifica part in the marketing of chillies. In West Bengal, almost abou four-fifth of the total saleable crop is assembled by the villag merchants. They collect the produce from the growers and carr it to the markets for sale.

In the Hyderabad State, the village merchants assemble th produce from cultivators who are indebted to them. They als purchase chillies in the weekly markets. When enough quantit has been collected, they pack it in *Andkas* and convey it to thos wholesale markets where favourable prices are available. I the Mysore State the village merchants assemble about 40 pe cent of the marketable surplus. The conditions prevailing i other States are more or less similar to those described in th preceding paragraphs.

In certain states like Madhya Pradesh, Bihar, the Punjab, Mysore, *etc.*, itinerant merchants also do a little of assembling of chillies. This, however, is only a side business for them.

(*c*) *By contractors and wholesale buyers.*—In certain parts of the country wholesalers are directly connected with assembling of the produce, while in others they have very little to do with it. In the Madras State, for instance they purchase the produce direct from the growers as also from the village merchants and through their own representatives. They stock the goods and sell them at opportune times. If they find a part of the stock deteriorating, it is disposed of in the local market through the indigenous traders. In Bombay, Madhya Pradesh, Orissa and West Bengal, on the other hand, wholesale merchants do not generally interest themselves in this aspect of marketing. In Bihar, the wholesalers and commission agents purchase their requirements from the growers and village merchants with the help of their agents. These agents assemble the produce and despatch it direct to the consuming markets on behalf of their principals. In Assam, the position is similar to that in Madras. The customs in other States also are similar to those described above.

(*d*) *By co-operative societies.* — There are very few co-operative societies which take interest in the chillies trade. In the Bombay State, there are two co-operative societies which deal mainly in chillies, namely, "The Byadgi Co-operative Chillies Sale Society Ltd., Byadgi, Dharwar District" and Tarapur Chinchani Co-operative Chillies Society Ltd., Chinchani, Thana District". The former society handles 3 to 6 per cent of the annual turn over of the Byadgi market, which is about one to two lac maunds. The latter society at Tarapur deals only in green chillies. "The Co-operative Agricultural Produce Sale Society Ltd., Sankeshwar, Belgaum District", transacts business in chillies in addition to other commodities like jaggery, groundnuts, cotton seed, etc. It handles about 1,000 maunds of chillies annually. Another co-operative society named "The Belgaum Gardeners Co-operative Produce Sale Society, Belgaum" sells the produce of its members and even non-members on a commission of 6 pies per rupee as against one anna charged by commission agents. It deals in green chillies and its popularity is increasing on account of the low commission that it charges on the sales.

There are co-operative societies in other States also but they do not concern themselves in the chillies trade. In the Mysore State, Consumers' Co-operative Societies at Mysore, Bangalore, Arsikere and Holanarsipur handle dry chillies along with other commodities but their turn-over in chillies is negligible. On the whole, it may be stated that the co-operative societies have not seriously taken to this field.

(*e*) *List of important distribution markets with approximate annual turn-over of chillies.*— A list showing some important

markets in different States in India and the quantity of chillies passing through them annually, is given in Appendix No. XLIII. It will be observed that Tuticorin in the Madras State is the most important market in so far as the annual turn over is concerned. It clears about 715,000 maunds of chillies annually. Other most important markets are Bombay with an annual turn-over of over 350,000 maunds, Calcutta, 325,000 maunds; Dhanuskudi in Madras, 300,000 maunds; Byadgi in Bombay State, 180,000 maunds; Patna in Bihar, 125,000 maunds; Kanpur in Uttar Pradesh, 100,000 maunds; Guntur and Calicut in the Madras State, 100,000 maunds each. Other markets whose turn over is below 100,000 maunds but all the same, are important in their respective States are Vellore, Madurai, Virudhunagar, Madras, Erode, Tirunelveli, Hindpur, and Pollachi in the Madras State; Poona, Nandurbar, Dondaicha and Sholapur in the Bombay State; Nagpur, Malkapur, Bhiwapur, Elichpur and Umrer in Madhya Pradesh; Shahpur Patori, Dalsing-Sarai, Barauni, Khagria, Samastipur, Mokameh, Barh, Rusera Ghat, Pusa Road, Bakhtiarpur and Dholi in Bihar; Kairana, Ramnagar and Sarkara in Uttar Pradesh; Gharunda, Murthal, Panipat, Amritsar, Ferozepur, Gharunda, Ganaur, Samalkha, Sonepat and Nakodar in the Punjab; Karimganj, Nowgong and Jorhat in Assam; Cuttack, Patarhat, Choumohini, Bhola and Barisal in West Bengal; Warangal, Nizamabad, Dharmabad, Peddapali and Raichur in the Hyderabad State; Mysore and Bangalore in the Mysore State and Patiala and Samana in Patiala and the East Punjab States Union.

CHAPTER VI. DISTRIBUTION

GENERAL

Assembling and distribution are integral parts of the movement of the produce from the producer's holdings to the consumer. Assembling culminates in the wholesale market, wherefrom the process of distribution actually begins. The channels through which the produce passes, eventually reaching the consumer, are illustrated in the diagram facing page 57. The functions of different agencies in the wholesale and retail distribution of chillies are discussed below :

(1) WHOLESALE DISTRIBUTION BY (*i*) PRODUCERS, (*ii*) VILLAGE MERCHANTS, (*iii*) COMMISSION AGENTS, WHOLESALE MERCHANTS AND (*iv*) CO-OPERATIVE SOCIETIES-EXTENT AND METHODS OF DISTRIBUTION.

(*i*) *By producers.*—The producers generally do not take part in the wholesale distribution of chillies. However, some big landlords, in States like Madras, Bombay, Madhya Pradesh, Bihar and Hyderabad cart their produce to the nearest wholesale markets and dispose it of through the commission agents or even sell it direct to the wholesale merchants. Some of them sell small quantities direct to the consumers also, as is the practice in the Bombay State, Madhya Pradesh and Orissa. In Uttar Pradesh, it is the general practice with the producers to bring the produce to the markets and sell it to the wholesale merchants or commission agents. The most common practice, however, in different States like Madras, Bombay, Bihar, the Punjab, West Bengal, Hyderabad and Mysore, is to part with the produce to the village merchants or in the alternative to take it to the nearest *Shandy* or *Hat* (weekly market) for disposal through the middle-men there. The growers usually find it convenient to dispose of the produce on their own holdings instead of carrying it to the weekly or wholesale markets. By doing so, they do not have to bother about the transport. Moreover, by disposing of their goods on their holdings, even though the returns may be comparatively less, they save themselves from the complications of the market practices.

(*ii*) *By village merchants.*—They form an important link in the chain of assembling and distribution of chillies in States like Madras, Bombay, Madhya Pradesh, Bihar, the Punjab, West Bengal, Hyderabad and Mysore. The village merchants purchase and assemble the produce from the villages and pass it on to the wholesale markets for distribution. Wherever and whenever necessary, they also bring chillies from the wholesale markets for consumption in the villages. So they serve a dual purpose. Generally the village merchants stock the produce, at their own

premises, for as short a time as possible, and sell it the momer the prices are favourable, at the nearest wholesale market to th local wholesale merchants or wholesale buyers from other co suming markets. In particular tracts where chillies are in sho production, they make direct sales to the consumers also, as some places in the Bombay State.

(*iii*) *By commission agents and wholesale merchants.*—Th commission agents and wholesale merchants form the pivot distribution and about 90 to 95 per cent of the total marketab surplus passes through their hands. It is difficult to draw a lir of distinction between the commission agents and the wholesa merchants, since in most of the markets the same parties do bo the jobs and work as commission agent *-cum-*wholesale merchan In some markets in Bihar and West Bengal, however, the cor mission agents do not undertake wholesale business and intere themselves only in selling and buying the produce on commissi basis on behalf of others. Usually commission agents have pe manent establishments and deal in different commodities b quite often a few other commission agents spring up during th height of the chillies' season, as in Bihar. The former deal local as well as imported chillies while the latter deal mainly the locally produced chillies. Then there are commission ager who do only the selling job, while there are others who do on buying on behalf of buyers.

The wholesalers make bulk purchases for local sale to th retailers or for despatch to consuming markets. They also a as commission agents for wholesalers in consuming markets.

General methods of working of commission agents *-cu* wholesale merchants are similar in that they act as inte mediaries between the producers and the buyers and help settling prices. In the case of imported produce, they arran for its transport from the railway station to the market and i subsequent handling. They pay the freight, octroi and oth incidental charges in the first instance and recoup the expens from the sale proceeds. The consignors have to rely on th honesty and integrity of the commission agents to whom th consign the produce and have to accept whatever sale proce are remitted to them. The growers and village merchants esta lish almost permanent connections with particular commissi agents and|or wholesale merchants through constant dealin Quite often, the commission agents or wholesale merchan advance loans to producers or even village merchants to indu them to bring the produce to them for disposal. Sometimes th send their representatives to the producing areas to canvas f them, advance loans and make direct purchases. By maki direct purchases they save market expenses such as commissi etc.

Some wholesalers from the consuming markets visit the di tributing markets personally for making purchases. In oth cases, the commission agents and|or wholesale merchants in di tributing markets despatch chillies, on their own account, commission agents in the consuming markets for sale.

As stated above, usually the same parties work as commission agents as well as wholesale merchants. This practice is very objectionable, since in such cases, profit and loss in the transactions directly affects the commission agent's own pocket and, therefore, he invariably tries to pay low prices to the consignor, who is usually ignorant of the market conditions. It is desirable that purchase by the commission agents of the produce sent to them for sale on commission should be made illegal and the rate of commission fixed, in different markets. This can be done by regulating markets dealing in vegetables and fruits.

(*iv*) *By co-operative societies.*—There are no Co-operative Societies doing wholesale distribution of chillies. It will, however, be advantageous if the producers form co-operative sales societies and take up the distribution of their produce in their own hands. In this way they will save the money which goes to the intermediaries and, consequently, have better returns.

(2) WHOLESALE MARKETS, CONSTITUTION, OWNERSHIP AND CONTROL.

The organisation, layout, ownership, etc., of the markets dealing in chillies are briefly discussed below :

There are no markets reserved for trade in chillies only except in a very few places like Umrer in Madhya Pradesh, Nizamabad in the Hyderabad State and Patiala and Sirhind in Patiala and the East Punjab States Union. Generally the wholesale markets used for other agricultural produce serve for chillies also. Wholesale markets are found in nearly all the cities, towns, district-headquarters and even important villages in India. Names of important assembling and distribution centres of chillies have already been given in the previous chapter. In smaller places the sales are held periodically, say once or twice a week, and such markets are known as *"Hats"* or *"Shandies"* while in important cities and towns business is conducted daily and the markets are of larger dimensions. The former are usually primary markets while the latter are generally secondary or terminal markets. Generally the wholesale markets are privately owned but in certain States, such as Madras, Madhya Pradesh, Orissa, the Punjab and Mysore some markets are owned by local bodies, *viz.*, Municipalities or District boards. The owners of the sites generally have no control over the business methods or practices prevalent in the market. They usually rent out each site separately to different wholesale merchants or commission agents. The local bodies, on the other hand, generally lease out the whole market to one person, who sub lets individual sites. In a few places like Calcutta, individual sites are also leased out by the municipal authorities. The municipal authorities look after the general cleanliness of the markets. The layout and size of the markets vary from place to place according to local conditions and requirements. Most of the markets have *kutcha* courtyards surrounded by godowns. The open space is generally uncovered and lacks protection from the sun and rain. At some places, however, the markets have *pucca* buildings, floors and even sheds, but such markets are only a few in number.

In the Madras State, wholesale markets exist in var assembling and distributing centres. Most of them are ow by local bodies and are leased out annually through auctio the highest bidder. The lessee collects the market fee at the prescribed by the local body. The local bodies generally rese the right to cancel the lease if the lessee breaks the terms of lease such as charging excessive market fee, etc. In so fa sanitation of the market premises is concerned, it is looked a by the local health authorities. In the case of a privately ow market, the landlord has to obtain a licence for it from the l body, in whose jurisdiction it is situated, and has to get licence renewed periodically. The licensee is bound to keep premises of his market clean under the terms of the lice which is open to cancellation, if the instructions therein are followed.

In the Bombay State, wholesale markets meant for trad the agricultural commodities are utilised for chillies also. G rally they consist of shops on both sides of a specified portio a particular road or open space and these shops are priva owned; hence there is no control over their business pract 18 markets in the Bombay State, however, have been regul for the sale of chillies in addition to other agricultural comm ties from 1950-51 onwards. The working of these market discussed later in this chapter. Cart loads of chillies are unlo in front of the shops and weighments and sales are effec Thereafter, they are stored in these shops or godowns situ nearby. Market charges levied on sellers and buyers are f by the local association of merchants.

In Madhya Pradesh, chillies are generally disposed o periodical markets used for other agricultural produce. T primary and secondary wholesale markets are owned by Dis Councils, who have enacted bye-laws for their control and m agement. They are leased out annually through auction and lessee is authorised to levy fixed market charges. At Um however, there is a market used exclusively for chillies and under the control of the local Municipal Committee. The mar in bigger towns, which are the real distributing centres, terminal markets, locally known as *Ganj* or *Mandi*, belong to local bodies and are managed by them. In Bihar also, there no markets used exclusively for the chillies trade. Mar meant for grains, spices and miscellaneous agricultural pro serve for chillies as well. Such markets have sprung up in p cular areas on account of their long usage for this type of tr Most of the dealers have their own shops and godowns in markets locally known as *Gola* or *Gola Bazar*, while only a have rented premises. Since they are privately owned, the l bodies do not exercise any control over them. These mar are usually over crowded, stuffy, unkept and connected by r which are far from satisfactory.

In Uttar Pradesh, both periodical and daily mar are to be found and most of these are privately ow In the Punjab, business in chillies is usually conducte the grain markets and most of these have now been regul

some places, however, fresh chillies are marketed at particular ts, away from the grain markets. The fresh chillies are dried hese very places, thus saving transport charges to the drying ds, as well as saving the local population from the inconve- nce caused by the pungent smell of chillies. In fact, the ozepore Municipal Committee has banned trade in chillies hin particular limits of the city. Markets in the Punjab are ner owned privately or by local bodies. At some places, how- r, buildings in the market are owned by commission agents, while the market yard belongs to the local bodies. At such ces the local bodies are responsible for the cleanliness of the d while the buildings are looked after by their respective ners. Such dual control of the markets is not conducive to sfactory results. Local authorities can exercise better control r markets owned by them. Market charges have been regu- ed in most of the markets in the Punjab.

In Assam, the wholesalers have their shops and godowns ally near the municipal retail markets and conduct business their own premises. In Orissa, wholesale markets which deal chillies along with the other agricultural produce, are to be nd in all the important towns. Generally they are privately ned but in a few cases they are built on land belonging to al bodies. The buildings on such sites belong to private indi- uals who let them out to wholesale merchants and commission nts on monthly rent basis. Local bodies do not exercise any trol over these markets except for collecting the licensing fee, roi, toll charges, etc.

In West Bengal, wholesale markets dealing in agricultural duce are located in all important *Mufassil* towns, as well as, big cities. The *Mufassil* markets are generally periodical rkets, popularly known as *Hats* and there are generally two rket days in a week. These markets are generally owned by *mindars* or landlords, who in most cases lease them out for cified periods. The lessee is entitled to levy toll as prescribed the owner of the *Hat*. Petty merchants generally have thatch- sheds on the premises while bigger dealers have *pucca* struc- es, consisting of godowns and shops, etc. The local bodies e no control over these markets. In Calcutta also the whole- markets are privately owned and the local authorities exer- no control over them except for insistence on sanitary condi- ns.

In the Hyderabad State most of the markets have been ulated. There are over 30 wholesale grain markets which deal chillies also. At Nizamabad, however, there is a separate rket-yard for chillies. These markets are controlled by Agri- ural Market Committees and are supervised by Market erintendents and their staff. The market charges are fixed by Market Committees and the market functionaries are nsed.

In the Mysore State, sale of chillies has been regulated in sore and Davangere markets.

In other States also, the conditions are more or less simil to those described in the preceding pages.

(3) System of sale, units of sale, weighment and weigh measures, scales used and malpractices.

(a) System of sale.—As stated earlier, the produce is sc either in the villages on the producers' holdings or in the marke The sale procedure is different in the two cases.

(*i*) *In villages.*—Primarily it is the village merchant w purchases the produce from the growers. Usually they ha long standing connections with each other and the produce find it convenient to dispose of their produce at their own pr mises. Buyers from assembling and distribution markets a visit the producing areas and make purchases either direct fr the producers or through the village merchant. The latter a more or less as a broker and helps in settling the prices different lots. The prices are usually settled by negotiatio and haggling.

(*ii*) *In markets.*—On the whole, the procedure of sale different markets does not differ much in principle though matter of details there are considerable variations. The produ is usually brought to the commission agent or wholesale mercha already known to the seller. The former arranges to dispo it of.

The sale may be effected by private negotiation, open aucti or under-cover bids. One or more methods may be prevale in the same market. In private negotiations, the purchas make offers to the commission agent and the purchase price settled after some haggling. The seller usually has the opti of rejecting the offer. This system is prevalent in the State Madras, in some areas of the Bombay State, Madhya Prade Bihar, Uttar Pradesh, Mysore State, etc.

In open auction, the buyers assemble in the market or front of the commission agent's shop. The commission agent his representative auctions each lot separately, the highest b being accepted, subject to the seller's approval. The buy satisfy themselves in regard to the quality and condition of t produce before bidding for it. The lots to be disposed of m be in loose heaps or in containers. In the latter case the buy take out samples for inspection before offering bids. Open auct method is practised in most of the markets in the Bomb State, Madhya Pradesh, the Punjab, Uttar Pradesh, Hyderal and Mysore. In the under-cover bid system, the buyer quo his offer to the commission agent by pressing his fingers un a piece of cloth. In this manner the latter finds out the pri offered by different buyers and disposes of the produce to highest bidder. This system is practised in some markets the Bombay State, Madhya Pradesh, Mysore, etc.

Wholesale trade in green chillies is on a limited scale, a major proportion of the produce being sold in dried condition. Green chillies are generally sold in the early hours of the day while dried chillies are disposed of throughout the day. Chillies are brought to the market in gunny bags, *Toddy mat* containers or even loose in carts, depending upon the prevalent custom and the distance involved. Generally the produce is brought direct to the market as in Bombay, Madhya Pradesh and Uttar Pradesh. In the Madras State, the prevalent custom is to keep the produce outside the market. The seller carries a representative sample to different buyers and after coming to a settlement with one of them, he conveys the produce to the latter's premises. The buyer checks the stuff with the sample, before it is weighed.

In the Bombay State, different practices prevail in different areas. In Karnatak area, in markets like Byadgi, Sankeshwar, Akalkot, etc., chillies are brought to the market in dried condition and well packed in gunny bags or in *Toddy*-leaf mats. The containers, are heaped together in different lots according to variety and quality in front of the commission agent's shop and are sold by open auction or negotiation. After settlement of the price, delivery of the produce is arranged. Payments are generally made on the spot. In Deccan markets like Dondaicha, Nandurbar, Karmala, etc., chillies are brought in ripe but undried condition and loose in carts. The produce is sold by open auction. The chillies are then dried by the buyer before despatch to consuming markets like Bombay, Ahmedabad, etc. Payment is made on delivery. In Gujarat area the conditions are the same as in Deccan.

The sale practices are more or less similar in different States though with variations in regard to details, as may have been observed from the examples discussed above.

(*b*) Unit of sale.—Units of sale vary from place to place and even though "Weights and Measures Act" has been promulgated in several States, the pernicious old system continues to exist. In many villages, the buyer simply estimates the weight of the chillies' heap by vision and invariably it is to his own advantage. In this case the unit of sale happens to be the heap itself.

In the Madras State, the basic weight is the lb. but the units of sale vary in different markets, the common ones being 250 lb., 65 lb., and 37 lb. In Cuddapah area, the unit consists of a cart-load of 500 lb. In the Bombay State, the basic unit is a maund of 28 lb. and the common unit of sale is a *Nag* of nine such maunds, but other units such as *Atki* or eight maunds, *Pala* of 120 standard seers and a maund of 16 seers are also used in different markets. In the Bombay City, a *Kandy* of 21 maunds of 28 ib, each is the basic unit in the wholesale trade of chillies

In regulated markets, however, standard maund is used for sa of the produce. In Madhya Pradesh, it is customary to quo a particular weight—say so many seers of green chillies p rupee. In the case of dry chillies the unit of price quotati is a maund, or *Kandy* of 20 maunds. The weight of a mau however, varies from 10 to 40 standard seers in different marke

In Bihar, there is a progressive tendency to adopt t standard maund as a unit of sale, but in a few markets li Bhagalpore, Khagaria and Naugachia, maunds of 52-1|2 and 42-: standard seers are still in vogue. In Uttar Pradesh, wholes: rates are quoted in terms of a maund but the weight of t maund varies from 40 to 50 seers in different markets. In t Punjab, the most common unit of weight is the standard mau but in the rural areas the weight of a maund varies from 40 50 seers. In the wholesale trade, green chillies are weighed scales, while in the case of dry chillies it is customary to ta the bag as unit of sale and the whole bag is weighed. In Assa the sales are effected on the basis of a standard maund. Orissa, the common unit of sale is the standard maund but a few markets like Cuttack and Berhampur, maunds of 108 and 107-1|2 lb. respectively are used. In West Bengal, standa maund is the common unit of sale though in the interior it also customary to quote in term of so many seers per rupee

In the Hyderabad State, the unit of sale is the *Andka* single *Andka* or a number of them may be offered for sale a time. Usually a lot consists of 4 to 20 *Andkas*. In the Mysc State, the unit of sale in some of the markets like Bangalo Challakere, *etc.*, is the local maund of 26 lb. while in Davange market, it is a *Satta* of 8 maunds of 28 lb. each. In some mark maunds of 24 lb., 29 lb. and 30 lb. are quoted as the unit of sa In Patiala and the East Punjab States Union, the unit is t standard maund. Prices are invariably quoted in terms rupees and it is only the unit of sale that varies from mark to market. From the above discussion, it would be observed th there is a great variation in the units of sale in different pa of the country which is apt to cause confusion in inter-St: trade. It is very desirable that the units of sale should standardised and be in terms of a standard maund and divisibles.

(*c*) PAYMENT OF PRICES.—The usual practice all over t country is to make prompt payment to the seller, but in certa cases when the seller and the commission agent or wholes merchant have long standing relations, the payment may deferred for a short period. The village merchants also ma delayed payment sometimes but this concession is afforded o if the seller and the buyer have reliance on each other. In t case of exports, the wholesale agents usually send out the produ on their own account but in some cases they do it on indent a Since the wholesalers do business on a large scale, the payme are usually made and received after a few weeks.

(*d*) Weighment and weights.—Weighments of small quantities generally made by hand scales but for larger quantities, ich are usually involved in the wholesale trade, beam scale most commonly used all over the country. The chillies along th containers such as gunny bags, *Toddy*-leaf mats or gunny ces are weighed and the weight is noted after deducting the ight of the container. Weights in use have already been cussed in the foregoing sections. Chillies are invariably sold weight. In Orissa, in some districts, however, dry chillies e sold by measure.

(*e*) Malpractices. — Numerous malpractices have been served in the chillies trade and most of these are common to ner commodities also. The producer-sellers and the petty rchants also are not averse to resorting to some of the mal-actices. When bringing the produce to the markets, they en mix semi-ripe chillies with dry ones and sprinkle water erally to cause an increase in weight. But it is usually the ler who suffers more than anybody else from malpractices vogue in the markets, because even though he may have mixed sh chillies with the produce and added water, due deductions r these are made in the prices by the buyers. On the other nd, the seller has no remedy for the malpractices on account which he suffers. The most common among them are discussed low :

(*i*) The prices are settled on the basis of the sample. At e time of actual delivery and weighment, however, quite often jections are raised by the buyer regarding the quality and ductions are arbitrarily made when making payment. The ller has perforce to agree to such deductions since it is incon-nient to repack and remove the produce again.

(*ii*) Weighing scales are faulty and very often unstamped eights are used. Weighing is usually done in a hurried manner d is inaccurate. At most places extra weight, usually a seer r every unit of sale, *viz.*, maund, kandy, etc., is taken by the yers, while weighing the produce. Full advantage is taken these factors by the buyer, especially if he happens to be the mmission agent himself.

(*iii*) In many markets, the commission agents and/or whole-le merchants buy chillies on the basis of a seer of 80 tolas or ore but sell them on lb. basis.

(*iv*) Samples taken out of the produce for showing around e retained by the commission agent, free of cost. At some aces, for instance in the Bombay State, in addition to the mples, the value of a sample of 1-3/4 lb. per bundle is charged om the seller by the commission agent and a similar charge is vied on the buyer.

(*v*) Chillies which drop out of the containers, at the time weighing are picked up and retained by the labourers. This

serves as an inducement to them to drop chillies intentional when weighing.

(*vi*) Sales "under cover" are common all over the counti As such, the seller has to depend entirely on the commissi agent regarding the fixation of prices. The latter is not aver to taking advantage of this, since the seller does not know the bids made by different buyers.

(*vii*) Calculations of prices and weight are not made proper and the seller usually being illiterate suffers in consequence.

(*viii*) In the case of deferred payments the seller is oft put off by frivolous excuses, especially so, if the buyer happe to be a petty merchant or a commission agent without sufficie means.

(*ix*) At the time of the arrival of new produce, if some o stock is left unsold, some of the sellers usually mix the latt with the former and pass it off as new stock. This is a natur tendency as the price of the old stock declines appreciably wi the arrival of the fresh produce.

(*x*) Some quantity of seed is always shed in the course drying and handling and this seed is of little value. Unscrupulo persons add such seed to the bags containing chillies to obta full price. The quantity added varies from 1 to 3 seers per ba

(*xi*) Chilli powder offers ample scope for malpractices. Th chilli powder offered for sale in the markets is usually man factured from chillies of low quality and old rotten stock. Mor over, seeds, stalks, under-ripe and blemished chillies along wi colouring matter in the form of *Geru* (red clay) form a part such chilli powder. Some unscrupulous dealers have taken t the practice of mixing powdered groundnut cake, crushed fen greek seed and rice husk with the chilli powder. It has als been observed that some traders make artificial chilli powder b grinding groundnut cake along with fenugreek seed and *Ge* (red clay) and adding a quantity of chillies extract to impa pungency to the finished stuff.

It will be observed that the seller has to suffer unnecessar losses on account of absence of any control over the dealings the people engaged in the trade in the markets. Similarly th consumers do not get their money's worth. The easiest way t check the malpractices is to establish regulated markets, atlea in the main producing and consuming centres.

(4) A NOTE ON REGULATED MARKET

The wholesale grain markets, where dry chillies are almo invariably sold, generally not being under the control of loc authorities, are not run on satisfactory lines. As stated in th preceding pages, many malpractices are in vogue. The cond tions in vegetable markets, where fresh chillies are sold alon with vegetables, are worse. Local bodies generally have n

ntrol over them except in so far as sanitation is concerned. orage facilities are unsatisfactory in most of them and they e unhygienic and insanitary. There is no control over the alers and commission agents in their business methods and the llers are at their mercy in the matter of payment. It is, there-re, not unusual to find dissatisfaction amongst the sellers with e present market practices. It is, therefore, desirable that gulated markets should be set up where there is enough turn-er of any agricultural commodity. Standardised market arges and conduct of business under set rules would go a ng way in removing the grievances of the sellers as well as e buyers.

Certain efforts on the part of marketing organisations, and hers interested in the general welfare of the society have made e state governments alive to the necessity of regulating markets their states. Madras, Bombay, Madhya Pradesh, the Punjab, derabad, Mysore and Patiala and the East Punjab States nion have made commendable progress in this respect. But in ost of these States, the markets have been regulated in regard particular commodities, such as cotton, groundnuts, tobacco, c. The sale of chillies has been regulated at a few places ly.

In the Bombay State, the sale of chillies has been regulated 18 markets. Out of these 7 namely, Byadgi, Karmala, Don-icha, Nandurbar, Sankeshwar, Sangli and Ahmedabad are nctioning. The others are expected to start working shortly. hmedabad is the first regulated market in India for fresh getables and fruits. It was brought under the purview of e Bombay Agricultural Produce Markets Act, 1939, in May 48, for the sale of fresh vegetables and lemons was concerned. he produce of villages within a radius of 12 miles from the hmedabad City comes under the purview of the Act.

Enormous difficulties raised by the fierce opposition of ddlemen and merchants had to be overcome before the regu-ion of the Ahmedabad vegetable and fruits market could be dertaken successfully. Inspite of these difficulties and ganisational handicaps, the market has worked fairly satis-torily. Apart from the elimination of malpractices and un-gulated and excessive charges, the regulation has resulted in o-economic benefit to the unorganised small vegetable and t growers. Being adequately represented on the market mmittee, the small producer has begun to feel that he has as ch voice as the middleman or merchant in the determination market practices. An excellent development has been the wing tendency on the part of the producer to sell his produce small lots, direct to the consumer or retailer without the aid any middleman. 50,000 maunds of chillies were sold at the hmedabad market in the year 1949-50. The charges levied at e Ahmedabad market are given below in Table No. 50.

TABLE NO. 50

Market charges levied at the Ahmedabad market

Particulars	Rate in pies	Unit	When received by Rail	Paid b
1. Market cess	3	Standard md.	3 pies per st. md.	Sel
2. Unloading charges	6	,,	6 pies per bag	,,
3. Loading on beam scale	3	,,	3 pies per st. md.	,,
4. Weighing	3	,,	3 pies per st. md.	,,
5. Recording	3	,,	6 pies per bag	,,
6. Commission	9	,,	9 pies per rupee	,,
7. Carting agent's charges	—	,,	4 annas per bag 3 pies per bag	,,
8. Clearing agent's charges	—	,,	3 (Goods train) or 9 pies (parcel train)	,,

Markets charges fixed in the regulated markets of Byad Karmala, Dondaicha, Nandurbar, Sankeshwar, Gadinglaj a Shalod are given in Appendix No. XLIV. The fixation of the charges and licensing of the market functionaries has been real benefit to the producer-sellers. They do not have to suff at the hands of unscrupulous dealers as heretofore and, mo over, gain monentarily as they do not have to pay unnecessa incidental charges now. The producers served by these regulat markets are estimated to have benefited by about 5 to 8 per ce by way of stoppage of free allowance in kind and by reducti in market charges. It is estimated that the producers in t jurisdiction of Ahmedabad market alone have gained abo Rs. 2,500,000 per annum by the regulation of the market.

The regulated markets in Madras and Madhya Pradesh not cater to the needs of producers of chillies. They are mea mainly for tobacco, groundnuts, cotton, etc.

In the Punjab, the sale of the chillies has been regulated 44 markets under the Punjab Agricultural Produce Mark Act, 1939. This has resulted in some improvement in regard to market practices but some malpractices still continue due strong vested interests. Market charges levied in some of important regulated and non-regulated markets in the Pun are given in Appendix No. XLV. It will be observed that charges have been reduced in the regulated markets standardising them and the abolition of such charges as *Ka Dharman, Palledai*, etc. The charges in the regulated mark vary only a little from market to market but in the case of n regulated markets, they vary a great deal and are at a mu higher level than in the regulated markets.

Good progress is being made in the Hyderabad State, Mys and Patiala and the East Punjab States Union in regard to regulation of markets. Looking to the prevailing market

nditions, the regulation of markets on as wide a scale as ssible, is a necessity in all the States. Regulated markets ould be constructed on modern lines with up-to-date storage cilities, ample space for conducting wholesale business, sanitary rangements and a competent body to settle disputes amongst e buyers, commission agents, etc. There should also be dequate arrangements for disseminating market news on rrivals, despatches, prices, etc.

(5) Market charges.

These consist of different charges which are levied on ıe produce after it enters the municipal limits of the arket towns and cities. There is a great disuniformity these charges, so much so, that even in the same state, they ıry from market to market. The basis on which these charges e made also vary from place to place *i.e.* in some markets ıey are charged on money value while in others on maund or ıg or even a cart-load. Further, in some markets particular ıarges are paid by the seller while in others the buyer pays ıe same. In some others, the same charges are payable both the sellers and buyers. In a few markets such as Calcutta, ıe charges vary for the local and the imported produce.

The commission agents meet some charges in the first stance, such as terminal tax, haulage from the railway station the market, cost of sorting, weighing, *etc.* This expenditure later recovered from the seller or buyer or from both accord-g to the prevalent custom. The deductions made from the llers and buyers may be in cash or kind or both. The usual harges are—

(*a*) Commission and/or brokerage
(*b*) Handling
(c) Weighing
(*d*) Charity
(e) Market fee
(*f*) Octroi and terminal tax
(*g*) Miscellaneous.

(*a*) *Commission.* Commission consists of the remuneration id to the commission agent for conducting sales of the produce. okerage is not very common in the chillies' trade. In the Bom-y State brokerage is charged in a few markets @8 annas to 1 per Rs. 100 worth of chillies. In Shalod market in the mbay State, 9 pies per *mani* of 6 standard maunds of chillies charged as brokerage. In Madhya Pradesh and Orissa, wever, brokerage is in vogue. In Bihar, the services of okers are utilised sometimes, if the buyers and sellers happen be at different places. The charges on this account are ually 8 annas per Rs. 100 payable by the buyers and in a w markets the sellers also have to pay 1 anna per Rs. 100/- the Punjab, brokerage is quite common.

As stated earlier, the commission charges vary a gr deal from market to market both in regard to their value a the basis on which they are charged. The usual custom, ho ever, is to charge commission on the basis of value on perce age basis. In the Madras State, both the sellers and the buy have to pay commission @ 3 pies per rupee. If, however, commission agent is buying on behalf of a wholeseller, gets 3 pies per rupee as well as the estimated value of the ex weight received in the transaction. In the Bombay State many as 18 markets have been regulated for the sale chillies since 1950, but actually only 7 have started functi ing. The market charges in these markets have been regulat Commission charges in these markets vary from 10 annas Rs. 1-9-0 per Rs. 100 and are payable by the seller. Byadgi market, however, 1½ pies per rupee are charged b from the seller and the buyer. Another ½ pie is charged dearness allowance to meet the increased expenses on est lishment. Previous to regulation, the seller had to pay 1 a per 28 lb. of chillies sold at Byadgi while at Sankeshwar had to pay Re. 0-1-9 for the same quantity. At Nandur previous to regulation commission was charged on the b of a *palla* of 96 standard seers and was 8 annas and Rs. 1- per *palla* from the seller and buyer respectively. At H the seller and buyer have to pay 3 annas and 2 annas standard maund respectively; but the seller is charged on basis of value @ 3 pies per rupee while the seller is charged on basis of weight *viz.* 6 pies per maund of 36-1/2 lb. in Mad Pradesh, the commission varies from 12 annas to a rupee Rs. 100 while brokerage charges vary from 2 to 8 annas *Khandi* of 6 standard maunds. At Nagpur, brokerage is char @ 1 anna per rupee.

In Bihar, commission is payable by both the buyers sellers. The commission charges paid by the buyers and sel vary from 12 annas to Rs. 1-9-0 per Rs. 100 and 12 annas Rs. 3-2-0 per Rs. 100 respectively, in different markets. As st earlier, brokerage is not common in Bihar, but if the serv of a broker are utilised, his payment is commensurate with work. It is usually 8 annas per Rs. 100 and is paid by buyer.

In Uttar Pradesh, commission is generally charged Rs. 1-9-0 per Rs. 100. Brokers are to be found in Kanpur ma only and are paid @ 4 annas per Rs. 100.

In the Punjab, markets have been regulated in most of important towns and chillies have been declared to be an a cultural produce in many of them. In such regulated mar the market charges are regulated and reasonable. In mar where chillies have not been declared as an agricultural pro under the marketing act, the charges are comparatively h In 21 out of the 28 main markets in the Punjab, commissio charged @ 1 per cent of the sale proceeds from the seller. 8 markets out of these 21, the buyers are also charged com

on varying from ½ to 1 per cent. In other markets the commis-on charges vary from Re. 0-13-6 to Rs. 2-13-0 except at Samalkha here the commission is charged @ 3 pies per rupee. Brokerage arges vary from Rs. 0-1-6 to 8 annas per Rs. 100 in different arkets, but the general rate is Re. 0-2-6 per Rs. 100. At Moga arket, however, brokerage is charged @ 6 pies per bag from th the seller and buyer.

In Assam, there being no regular trade in chillies, there are commission charges. In Orissa, the commission charges vary om 12 annas to a rupee per Rs. 100 while brokerage is 6 annas r chillies worth Rs. 100 and is payable by the seller. In West ngal, in the *mufassil* assembling markets, commission is charged 2 to 4 annas per maund from the buyer. In Calcutta, 8 annas r maund are charged for the chillies produced within the ate with an additional charge of 2 annas per maund for storage. r imported chillies, commission is charged @ Rs. 1-8-0 per . 100.

In the Hyderabad State, commission charges vary from e. 1 to Rs. 2 per Rs. 100 in different regulated markets and are yable by the seller. In the Hyderabad City market which not regulated, commission is charged @ Rs. 1-4-0 per Rs. 100 paid in cash, otherwise it varies from Rs. 1-4-0 to Rs. 2-8-0. In e Mysore State, the usual rate of commission is 2 annas per . 100 worth of chillies, while no brokerage is charged. In tiala and the East Punjab States Union, both the buyer and the ller have to pay commission @ Rs. 1-9-0 per Rs. 100, while okerage is charged @ 5 annas per Rs. 100, if the services of okers are utilised.

(*b*) *Handling*.—Handling charges are wages paid to the bourers for unloading the produce in the market, emptying e containers, sorting the produce, sampling, filling the bags d stacking them, etc. These charges are usually paid by the llers but the buyers are also charged for the labour utilised ter the purchase has been effected. They are generally charged the basis of a bag, irrespective of the net weight of the oduce contained in it. In the Madras State handling charges clude weighing charges and vary from 3 to 6 pies per bag ually containing 56 lb. of dry chillies. In the Bombay State, Byadgi market, the seller has to pay Re. 0-1-6 and 6 pies as arness allowances. Previous to regulation he had to pay e 0-4-3 per package while the buyer had to pay Re. 0-3-6 per ckage. At the Nadurbar market the seller has to pay 6 pies nd 1 anna per standard maund of wet and dry chillies respec-vely. The pre-regulation charges were 1 anna per *palla* of standard seers. In other markets the handling charges vary om 6 pies to 2 annas per bag. At Sankeshwar and Dondaicha th the seller and buyer have to pay 6 pies to 1 anna per maund. Madhya Pradesh, 3 to 6 pies per bag are levied as handling harges in different markets and are borne by the buyers. In har, the charges are from 1 anna to Re. 0-2-6 per bag.

In Uttar Pradesh, the charges vary from 3 to 6 pies per b in different markets. At Lakhimpur, however, a deductions 2 annas per maund is made to cover handling, weighing, chari etc.

In the Punjab bagging charges vary from 6 pies to 2 anr per bag including sewing charges. In some markets, charg are made on percentage basis varying from 2 annas to Re. 0-: per Rs. 100 worth of chillies. Other handling charges such unloading, arranging the produce for sale, etc., are sometim included in the bagging charges but in a few markets they a levied separately. At Jullundur and Gurdaspur markets, Re. 0-: per cent is charged as handling charges but out of this Re. 0- per cent is returned to the seller if he opens the contain himself and heaps up the produce for sale. At Moga 1 *chha* per bag is charged as handling charges and 1 anna per bag bagging. The maximum charges are at Jalalabad where t seller has to pay @ Re. 0-5-0 per cent.

In Assam, there being no regular trade in chillies, no char are levied. In Orissa, handling and weighing charges are co bined together, the rate being 1 anna per bag, being payable the buyer. In West Bengal, the seller has to pay 1 anna standard maund as handling charges in the assembling mark while the buyer is charged Re. 0-1-6 to 2 annas per maund packing the produce. In Calcutta, the charges vary betw Re. 0-1-6 and Re. 0-2-0 per maund, being payable by the sel Handling charges in the Hyderabad State vary from 8 pies Re. 0-1-7 per Rs. 100 worth of chillies in different regula markets. In the Hyderabad City market, however, which unregulated, handling and weighing charges are paid together kind @ $\frac{1}{2}$ seer per *palla* of 120 seers. i.e. $\frac{1}{6}$ seers per mau In the Mysore State 1 anna per bag is charged.

(c) *Weighing*.—As stated above, in the Madras State a Orissa, no extra charges are levied for weighing. In the Bomb State, in most of the markets weighing charges are paid by sellers but in some markets like Hubli, both the buyers and seller are charged. The charges vary from market to mark For instance, at Byadgi, 6 pies per *andagi* are charged for wei ing the produce while at Sankeshwar 4 pies are charged per *b* of 2 standard maunds. At Nandurbar and Dondaicha, weigh costs 5 and 6 pies per maund for wet and dry chillies respectiv In other regulated markets also the charges are about the sa At Hubli, which is not a regulated market, the unit of weighm is *andagi* of 5 to 6 maunds of $26\frac{1}{2}$ lb. each and both the seller the buyer have to pay 1 anna and 3 pies respectively per *and*

In Madhya Pradesh, at Umrer, the chief chillies market the State, 8 annas per cartload is charged for weighment while the other markets the rate is 1 anna per *khandi* of 240 se Generally, however, the sellers or the buyers attend to weigh themselves and as such do not incur any expenses on this it. In Bihar, both the buyers and the sellers have to pay 6 pie

anna per bag, as weighing charges. In Uttar Pradesh, 3 pies er maund is charged for weighing the produce and it is generally ne seller who has to pay. In the Punjab, weighing charges re made on the basis of percentage of the value of the roduce sold. The charges vary from Re. 0-2-6 to Re. 0-7-0 per s. 100 but the usual rate is Re. 0-3-6. In most of the markets the Punjab, the seller has to pay the weighing charges. In ne or two markets the charges are made per bag or on maund asis. In West Bengal, payment is made in kind *i. e.* 1 seer of ne produce for every maund weighed. In the Hyderabad State, eighing charges in regulated markets vary from 4 pies to e. 0-1-8 per Rs. 100 worth of the produce sold. In the Hyderabad ity market, as stated earlier, weighing charges are included in andling charges. In the Mysore State, 6 pies per bag is the sual charge while in Patiala and the East Punjab States Union, harges vary from market to market. In Patiala proper, the harges are 5 annas for weighing produce worth Rs. 100, while in ther markets 6 pies per maund or 3 pies per bag is charged.

(*d*) *Charity*.—It is the usual practice to realise some money om the sellers and in some cases from the buyers also, in the orm of charity. This money is supposed to be used for the benefit f orphanages, schools temples, *Gowshalas*, etc. There is no uarantee, however, that it is actually used for the purpose for hich it is collected and some unscrupulous commission agents re not averse to retaining it for themselves. The levy on ccount of charity varies from place to place. In the Madras tate, 3 to 6 pies per maund of chillies sold are deducted as harity from the sale proceeds. In unregulated markets in the ombay State, realisation on account of charity is generally ade both from the seller and the buyer. In regulated markets o deduction is made on account of charity. In Madhya Pradesh, ne seller has to pay 2 to 6 annas per cartload as charity. In ihar, both the seller and buyer contribute towards charity. he contributions of sellers vary from 1 anna to 4 annas per s. 100 worth of chillies while the buyers pay Re. 0-1-3 to Re. 0-4-0 er Rs. 100. In Uttar Pradesh, in most of the markets 1 anna er Rs. 100 worth of the produce is charged from the sellers ut in the Kashipur market (Nainital district) 9 pies per bag s charged. In the Punjab, deduction on account of charity has een disallowed in the regulated markets, where chillies have een declared as an agricultural produce. In unregulated mar-ets, however, the practice continues. For instance at Moga arket, 1 anna per Rs. 100 worth of chillies is charged as *harmada*, while at Dharmkot market half a seer per maund is harged on the same account. In some regulated markets also, he legal ban is by-passed by weighing half a seer to one seer ore for every maund purchased. In Orissa it is the buyer, who ays for charity at a flat rate of 6 pies per Rs. 100. In West Bengal he custom of charging on account of charity has been abolished n most of the markets but in some markets, a combined levy n account of charity and *gaddikharach* (establishment charges

is still made on the seller and it varies from 3 to 6 pies pe maund. Deductions on account of charity have been abolishe in most of the markets in the Hyderabad State but in a fe markets like Nizamabad and Raichur 2 to 6 pies per Rs. 1(worth of produce are charged even now from the sellers. I the Mysore State, 1 anna per cartload or 3 pies per Rs. 100 charged as charity while in the Patiala and the East Punja States Union, it is 1 anna per Rs. 100, payable by the seller.

(*e*) *Market fee.*—In some markets, the local bodies or th owners of private markets or the commission agents workin therein levy a fee on the produce entering the market premise The fee may be charged on the basis of a maund, headload, or cartload. In Madras State, 1 anna per headload and 4 anna per cartload are charged as market fee from the sellers, in almo all the markets. In Bombay State, very few markets lev market fee. For instance, 3 pies per standard maund is charge as market fee at Ahmedabad. In Madhya Pradesh also, onl some of the markets levy the fee, the rate varying from 1 t 4 annas per cartload, payable by the seller. In Uttar Pradesl Lakhimpur market authorities charge 8 annas per cartload. I the Punjab, the market committees have been empowered t charge market fees under the Punjab Agricultural Produc Market Act, 1939, whereunder markets were regulated in th State. The market fee varies from ½ pice to 2 pice per maun of agricultural produce brought and sold and is charged fro the licensed buyers and sellers. As such the producer is n burdened with this payment. In the Hyderabad State, mark fee comes to 4 annas per Rs. 100 of the produce sold in the regu lated markets, while in the unregulated market of Hyderaba City it works out to 9 pies per Rs. 100. In the Mysore Stat market fee is charged @ 2 to 4 annas per cartload in differer markets. In other States, it is not customary to charge mark fees.

(*f*) *Octroi and terminal tax.*—Octroi and terminal tax ar charged by local bodies on the produce entering the municip limits and the payment is invariably made by the sellers. Octr is charged on the basis of the value of the produce while th terminal tax is based on its weight. These taxes are levied o chillies in some of the States only, like Madhya Pradesh, Utta Pradesh, the Punjab, Orissa, Hyderabad and Patiala and th East Punjab States Union. The rates vary a great deal, as fo instance in Madhya Pradesh terminal tax is charged @ 3 to pies per maund of dry chillies while it ranges from 2 annas t Rs. 1-8-0 per maund in the Punjab. At Kanpur in Uttar Prades terminal tax is charged @ 2 annas per maund of dry chillie In the case of octroi also, there is a great variation, the rat being Rs. 3-2-0 to Rs. 4-11-0 per Rs. 100 in Madhya Prades markets as against Rs. 4-11-0 to Rs. 12-8-0 in the Punjab. I the Hyderabad State toll tax is charged and it works out to to 11 pies per Rs. 100.

(*g*) *Miscellaneous charges.*—In addition to the charges ready discussed above, certain other expenses are incurred in arketing the produce, such as postage and telegram charges, *rta* or *karda* or *dhalta dami* cartage, road fund and other ndry charges on items like twine, gunny bags, mats, godown nt, etc. All these charges are not levied in all the markets t only those, which common practice and usage allow, are ken into account in different markets. Cost on these items is alised from the sellers or the buyers according to the prevalent stom.

In case the sellers and/or buyers do not visit the market, a rtain amount of correspondence is inevitable. Usually actual penses are charged for such correspondence but in some arkets a flat rate is levied. In certain markets in Bihar an tra levy is made for writing letters, etc. and is locally known *tahrir.*

Karda is the excess in weight given to the buyer to compensate him for extraneous matters and loss in weight due to rinkage, etc. This is common in most of the markets, though nown by different names. This extra allowance varies in fferent markets.

Dami is another form of commission charged from the buyers. ut of this a certain rebate is given to the buyers and some ercentage is given to the sellers.

Certain State Governments have introduced sales tax during e past few years. It is realised from the buyers. Usually it aries from 3 to 6 pies per rupee.

It will be observed from the foregoing discussion that marketing charges under different heads vary considerably from lace to place. Due to this wide variation, total marketing harges are also different in different areas and in some of the arkets they are too high. They have to be met, because of ng usage and custom and also for the fact that the producer-llers have no means to safeguard their interests. It is extremely desirable that market charges should be regularised, keeping n view the local requirements and peculiarities and this can e best done by regulating markets in all important assembling nd distributing centres.

(6) RETAIL DISTRIBUTION-AGENCIES AND METHODS.

There is no particular organisation for the retail distribution f chillies. They reach the consumer through one or the other f the agencies mentioned below :

(*i*) Producers.
(*ii*) Village merchants.
(*iii*) Wholesale merchants.
(*iv*) Retailers.

(*i*) *Producers.*—The producers generally do not take part in he retail distribution of dry chillies. They prefer to dispose of heir whole produce in one lot. At certain places, however, the

producers sell small quantities in retail, in the weekly mark to get enough money in cash for making sundry purchases. the case of green chillies also, if produced on a field scale, t producers dispose them of in big lots. Small quantities ho ever, may be retailed by them in the weekly bazars or on mark days. There is another class of growers, who specialise in pr ducing vegetables and they grow chillies as a garden crop. Th sell green chillies along with other vegetables in daily or week markets according to prevalent customs. Taken as a who however, the quantities of chillies, dry as well as green, sold l the producers in retail are insignificant.

(*ii*) *Village merchants.*—The village merchants' main fur tion is to assemble the produce and send it to the assembli markets. They do, however, keep small quantities of dry chilli for sale in the rural areas, especially in the off-season. Pet village merchants sell dry as well as green chillies in sm quantities on the weekly market days while grocers in the villag maintain small stocks for constant disposal. But the quanti handled by such merchants is small in view of the fact th the producers in the villages try to be self-sufficient as far possible in the commodities they produce. In a few States su as the Punjab, some quantity of fresh chillies is retailed in t villages by local donkey-drivers, who carry donkey-loads chillies, and sell them by roaming about from village to villa They sell chillies by bartering them for grain and invariab make a good bargain, because the villagers do not mind parti with some quantity of grain, even though it may be cheap to purchase their requirements in cash. In fact the donke drivers are averse to selling their stock on cash paymer They insist on payment in the form of grain. This metho however, is slowly disappearing as the villagers have com to realise that they lose more by paying in grains than in cas

(*iii*) *Wholesale merchants.*—It is not usual for the whol salers to interest themselves in the retail business, but in certa States like Madhya Pradesh, Uttar Pradesh, Orissa, etc., son wholesalers maintain retail shops also. They sell chillies in reta in these shops. Wholesalers owning retail vegetable and fru shops also sell green chillies there and some even employ hawke to dispose of their goods. Such cases, however, are not comm and as such the quantities disposed of in retail in this mann are small.

(*iv*) *Retailers.*—A very large proportion of retail distributi of chillies, as in the case of other produce, is done by t retailers. Usually there are no retail markets and the retail sho are to be found in nooks and corners, bazars and importa streets. These shops cater to the needs of the people living the surrounding localities. The retailers purchase their requir ments from the wholesale merchants or through the commissi agents and dispose of the same as expeditiously as possible. D chillies are sold by grocers dealing in articles like pulses, grain

., while green chillies are sold by the vegetable stall-holders. reet hawkers also play their part in distributing green chillies, t as stated earlier, it is the retail shopkeeper who is responsible a very large proportion of the retail distribution of chillies.

(7) RETAIL MARKET.—THEIR CONSTITUTION, OWNERSHIP, MARKET CHARGES, CONTROL, ETC.

There are no regular retail markets for the retail sale of illies exclusively anywhere in India. Dry chillies are usually ld in retail by grocers and dealers in foodgrains, pulses, spices, c. Shop dealing in these commodities are to be found in zars, important streets and other conspicuous places. In cer- in towns, however, several retail shops may come to exist in particular locality or bazar, which is easily accessible. These ops are generally privately owned and as such the question of eir constitution, ownership, market charges, etc., does not ise.

Green chillies are generally sold in retail by vegetable alers, and their shops are also to be found in all important reets, bazars and other important consuming localities. enerally they are privately owned. In big towns and cities like mbay, Lucknow, Kanpur, Hyderabad, Bangalore, Mysore and ost of the Cantonments, however, there are regular retail arkets built and owned by the municipal or cantonment thorities.

Individual stalls are let out to the dealers on rental basis. he authorities do not exercise any control over the business ethods prevalent in these markets. They only see that general eanliness is maintained in the market premises. In certain arkets *e.g.* Bangalore, etc., entry fee is charged for the produce ming in for sale.

As stated earlier, retail sales of chillies are also conducted the periodical markets or bazars in most of the small towns nd important villages, almost all over India. These periodical arkets, which are usually held weekly or bi-weekly, serve ot only as assembling centres but also as distributing centres a small way. These markets are generally owned privately nd the owners levy tolls on commodities entering the market remises for sale. In the more important markets, raised plat- rms are to be found along with a few shops. In Assam, the arket places, locally called *hats* are owned by the local bodies. hey are leased out by auction and the lessee is entitled levy toll at scheduled rates on commodities coming into the arket for sale.

(8) COST OF DISTRIBUTION—PRICE SPREAD FROM PRODUCER TO CONSUMER.

All the agencies through which chillies pass before reaching he consumer have a share in the price that the latter pays. The hare of each agency varies from place to place, depending upon revailing customs, market charges, distance of the consuming

market from the producing centre and the number of agenc involved before the produce actually reaches the consumer

As stated earlier, most of the producers sell their wh crop and do not maintain any records of their sale proceeds. is, therefore, difficult to find out their share in the consume price unless actual details of disposal of particular lots a known. Estimates have had, therefore, to be drawn up and t approximate distribution of the consumers' price amongst t various agencies involved, at some places is discussed below a illustrated in the diagrams between pages 112 and 113.

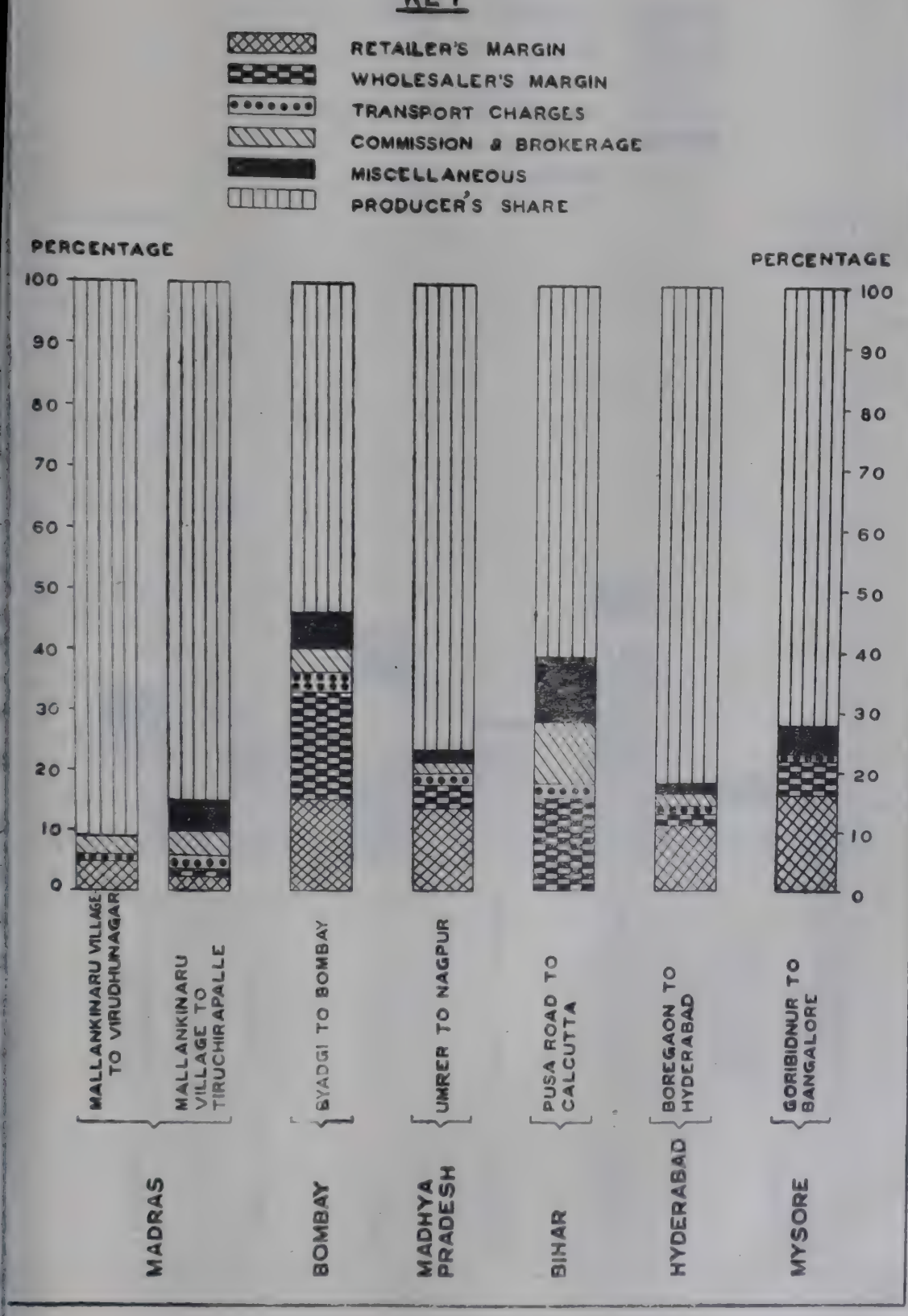
Madras.—The following examples in Table No. 51 sh the distribution of the price paid by the consumer for two c signments of 246 lb. each of dry chillies produced at Mallankina village near Virudhunagar and sold at Virudhunagar and Ti chirapalle markets respectively.

TABLE NO. 51

Price spread in the Madras State

Serial number	Particulars	Mallankinaru village to Virudhunagar market				Mallankinaru village near Virudhunagar Tiruchirapalle mark			
		Dry chillies							
		Amount			Share of the price paid by the consumer	Amount			Share the pr paid by th consun
		Rs.	a.	p.	Per cent	Rs.	a.	p.	Per ce
1	Retailer's price paid by the consumer.	302	4	0	100.0	323	0	0	10
2	Retailer's margin ..	15	4	0	5.0	6	12	6	
3	Wholesale price ..	287	0	0	95.0	316	3	6	9
4	Wholesaler's margin ..	..			..	4	8	0	
5	Sales tax ..	..			..	9	7	0	
6	Total transport charges	2	15	3	1.0	6	15	0	
7	Commission and brokerage	9	1	0	3.0	13	6	0	
8	Miscellaneous charges such as cost of bags, stitching, handling, charity incidental charges at the railway station, etc.	0	8	9	0.2	7	8	6	
9	Producer's share ..	274	7	0	90.8	274	7	0	8

DISTRIBUTION OF CONSUMER'S RUPEE FOR DRY CHILLIES.



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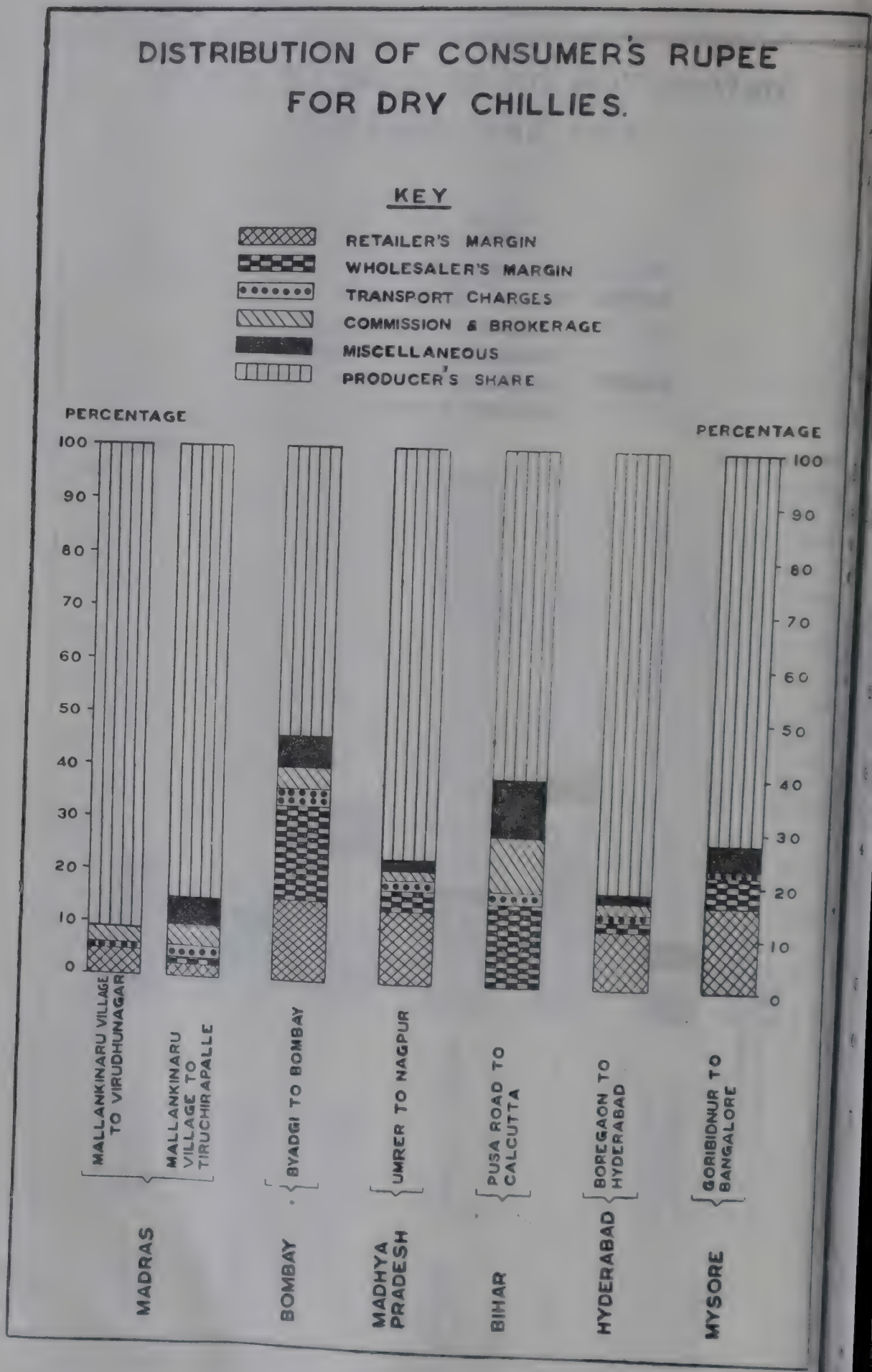


Bombay.—The following statement in Table No. 52 shows e price spread of a consignment of dry chillies weighing 196 produced at Byadgi and a consignment of green chillies ighing 276 lb. produced at Panvel and sold at Bombay.

TABLE NO. 52

Price spread in Bombay State.

rial m- er	Particulars	Dry chillies		Green chillies	
		Byadgi to Bombay	Share of the price paid by the consumer	Panvel to Bombay	Share of the price paid by the consumer
		Amount		Amount	
		Rs. a. p.	Per cent	Rs. a. p.	Per cent
1	Retailer's price paid by the consumer.	250 0 0	100.0	36 15 3	100.0
2	Retailer's margin ..	38 0 0	15.2	9 2 9	24.8
3	Wholesale price at Bombay.	212 0 0	84.8	27 12 6	75.2
4	Wholesaler's margin including interest, godown rent, insurance, staff, shop expenses, etc.	44 6 0	17.8	..	..
5	Total transport charges	8 5 0	3.3	3 5 0	9.0
6	Commission and brokerage.	10 0 6	4.0	1 11 6	4.7
7	Miscellaneous charges including cost of containers, market and municipal charges, handling, unloading, sorting, mixing, refilling, stitching, loading, stacking, driage, charity, trader's fund, postage, etc.	14 15 0	6.0	0 3 0	0.5
8	Producer's share ..	134 5 6	53.7	22 9 0	61.0

Madhya Pradesh.—The following statement in Table No. shows the analysis of the consumer's price paid for a lot green chillies weighing 1 maund produced at Besa village a a consignment of dry chillies weighing 8 maunds 2 seers p duced at Umrer and sold at Nagpur in Madhya Pradesh.

TABLE NO. 53

Price spread in Madhya Pradesh.

Serial number	Particulars	Dry chillies		Green chillies	
		Umrer to Nagpur		Besa village to Nagp	
		Amount	Share of the price paid by the consumer	Amount	Share the pri paid by th consum
		Rs. a. p.	Per cent	Rs. a. p.	Per cer
1	Retailer's price paid by the consumer.	924 0 0	100	13 8 0	10
2	Retailer's margin ..	126 12 6	13.7	1 5 10	10.
3	Wholesale price ..	797 3 6	86.3	12 2 2	89.
4	Wholesaler's margin ..	37 6 6	4.0	..	..
5	Commission ..	14 10 0	1.6	0 11 6	5.
6	Transport charges ..	19 0 0	2.1	0 14 0	6.
7	Miscellaneous charges, including bags, tax, octroi, handling, etc.	19 1 0	2.1	0 0 10	0.
8	Producer's share ..	707 2 0	76.5	10 7 10	77.

Bihar.—The following two examples in Table No. 54 sho the price spread in the case of one maund of green chillies pr duced at village Sahnaura and sold at the nearby market Barh and four maunds of green chillies produced at Pusa Roa and exported to Calcutta after drying.

TABLE NO. 54

Price spread in Bihar.

rial im-er	Particulars	Dry chillies		Green chillies	
		Pusa Road to Calcutta		Sahnaura to Barh	
		Amount	Share of the price paid by the consumer	Amount	Share of the price paid by the consumer
		Rs. a. p.	Per cent	Rs. a. p.	Per cent
1	Retailer's price paid by the consumer.	..	..	20 11 0	100
2	Retailer's margin ..	..	..	2 0 0	9.7
3	Wholesale price ..	105 0 0	100	18 11 0	90.3
4	Wholesaler's margin ..	16 7 9	15.7	2 0 0	9.7
5	Commission ..	10 10 0	10.1	0 9 0	2.7
6	Transport charges ..	2 11 6	2.6	0 2 0	0.6
7	Sales tax ..	1 4 3	1.2	..	..
8	Miscellaneous charges including cost of drying, packing, handling, driage during transit, incidental.	9 14 6	9.4	..	..
9	Producer's share ..	64 0 0	61.0	16 0 0	77.3

Punjab.—The following statement in Table No. 55, shows the rice spread in the case of one maund of green chillies produced a village near Jullundur and sold at Jullundur and 9 maunds seers of green chillies produced at Ramnagar near Ambala ity which were sold in fresh stage at Ambala but dried later efore being sold to the consumer.

TABLE NO. 55

Price spread in Punjab.

Serial number	Particulars	Jullundur		Ramnagar to Ambal	
		Amount	Share of the price paid by the consumer	Amount	Share of the price paid by the consumer
		Rs. a. p.	Per cent	Rs. a. p.	Per cent
1	Retailer's price paid by the consumers.	18 12 0	100	156 4 0	100
2	Retailer's margin ..	6 8 0	34.7	23 2 0	14.8
3	Wholesale price ..	12 4 0	65.3	133 2 0	85.2
4	Wholesaler's margin ..	0 12 6	4.2	5 9 6	3.6
5	Transport charges ..	0 4 0	1.3	4 1 6	2.6
6	Commission and brokerage.	0 5 6	1.8	0 14 9	0.6
7	*Middleman's margin ..	..	..	32 1 3	20.5
8	Miscellaneous charges including octroi, market fees and charges, drying, handling, weighing and costs of bags, etc.	0 1 6	0.5	11 10 6	7.5
9	Producer's share ..	10 12 6	57.5	78 12 6	50.4

*The person who purchased green chillies and dried them before selling them.

Orissa.—The following example in Table No. 56, shows the price spread in the case of one maund of green chillies produced at Jhinkira-Berhampur village and sold at Cuttack.

TABLE NO. 56

Price spread in Orissa.

rial um- er	Particulars	Jhinkara-Berhampur to Cuttack	
		Amount	Share of the price paid by the consumer
		Rs. a. p.	Per cent.
1	Retailer's price paid by the consumer ..	41 0 0	100
2	Retailer's margin	4 0 0	9.8
3	Wholesale price	37 0 0	90.2
4	Wholesaler's margin	2 0 0	4.9
5	Transport charges	1 4 0	3.0
6	Miscellaneous charges, including, handling, driage, etc.	3 12 0	9.1
7	Producer's share	30 0 0	73.2

West Bengal.—Price spread in the case of one maund of een chillies produced at Bhangore in the 24-Parganas district d sold at Calcutta is shown below in Table No. 57.

TABLE NO. 57

Price spread in West Bengal.

rial um- er	Particulars	Bhangore to Calcutta	
		Amount	Share of the price paid by the consumer
		Rs. a. p.	Per cent.
1	Retailer's price paid by the consumer ..	56 0 0	100
2	Retailer's margin	13 8 0	24.1
3	Wholesale price	42 8 0	75.9
4	Wholesaler's margin	5 0 0	8.9
5	Transport and incidental charges	2 8 0	4.5
6	Producer's share	35 0 0	62.5

Hyderabad.—The statement given below in Table No. 58 ows the analysis of the consumer's price paid for one maund ch of dry and green chillies produced at Boregaon village Nizamabad) and Hasanparti (Warangal) respectively and sold the Hyderabad City.

TABLE NO. 58

Price spread in Hyderabad.

Serial number	Particulars	Boregaon to Hyderabad		Hasanparti to Hyderabad	
		Dry chillies		Green chillies	
		Amount	Share of the price paid by the consumer	Amount	Share o the pric paid by the consume
		Rs. a. p.	Per cent.	Rs. a. p.	Per cent
1	Retailer's price paid by the consumer.	118 14 6	100	18 10 6	100
2	Retailer's margin ..	13 3 5	11.1	0 12 0	4.0
3	Wholesale price ..	105 11 1	88.9	17 14 6	96.0
4	Wholesaler's and middleman's margin.	2 1 2	1.8	2 4 7	12.2
5	Commission ..	2 8 3	2.1	..	..
6	Transport charges ..	1 13 0	1.5	2 13 3	15.2
7	Miscellaneous charges including cost of containers, handling, driage, market and toll tax, charity, drying and filling, etc.	2 2 6	1.8	2 9 2	13.8
8	Producer's share ..	97 2 2	81.7	10 3 6	54.8

Mysore.—The following statement in Table No. 59 shows th price spread in the case of 26 lb. each of dry and green chilli produced at Goribidnur and Hosakote respectively and sold Bangalore.

TABLE NO. 59

Price spread in Bangalore.

Serial number	Particulars	Goribidnur to Bangalore		Hosakote to Bangalore	
		Dry chillies		Green chillies	
		Amount	Share of the price paid by the consumer	Amount	Share of the price paid by the consumer
		Rs. a. p.	Per cent	Rs. a. p.	Per cent
1	Retailer's price paid by the consumer.	40 0 0	100	6 0 0	100
2	Retailer's margin ..	6 8 0	16.3	1 0 0	16.7
3	Wholesale price ..	33 8 0	83.7	5 0 0	83.3
4	Wholesaler's margin ..	2 4 0	5.6	0 8 0	8.3
5	Transport charges ..	0 5 4	0.8	0 5 0	5.2
6	Miscellaneous charges including handling, bagging, market charges, etc.	2 1 0	5.2	0 9 0	9.4
7	Producer's share ..	28 13 8	72.1	3 10 0	60.4

It will be observed, that there is a vide variation in the share the producer, in the price paid by the consumer. In the case dry chillies, the producer's share, ranges from 50.4 per cent in ne Punjab to 90.8 per cent in the Madras State. In the case of reen chillies, the producer's share varies from 54.8 per cent in ne Hyderabad State to 77.7 per cent in Madhya Pradesh. The nare of the producer decreases progressively, with the increase n the number of intermediaries, and the distance of the consum- ng market from the producing area. It is desirable to stand- rdise market charges, reduce the number of intermediaries and rovide cheap and suitable transport, in order to increase the ncome of the producers. Efforts are also needed, to encourage ales through co-operative societies.

CHAPTER VII—STORAGE

(1) PERIODICITY AND EXTENT OF MARKET GLUTS, THEIR CAUSES AN CONTROL.

Dry chillies do not generally suffer from gluts, in th manner in which perishables do, for two reasons. Firstly becaus supply and demand are more or less balanced and it is seldo that the former is too much in excess over the latter. Th demand for chillies is practically inelastic ; hence the distribu tion is regulated accordingly. Secondly even if at times, supp is abundant, the chillies can be stored successfully for som months, if kept in dried condition. There are, however, perio of abundant supply and short supply. The disposal of the pr duce starts soon after the beginning of the harvest. In Madra for instance, September to January is the busy period while the Bombay State, 85 per cent of the produce is disposed during the months, November to March. In Madhya Prade also, a major proportion of the stock is sold out during th period, November to March. Conditions in other producing are are more or less similar varying to a certain degree accordi to the period of harvest.

(2) METHODS OF STORAGE.

Storage plays an important part in the chillies' trad Proper drying and storage have a direct bearing on the quali of the produce, as already discussed in the Chapter on "Prep ration for the Market". Methods of storage, as adopted b different agencies, are discussed below:

(a) *By producers.*—The producers of chillies do not general store any appreciable quantities of the produce. Firstly, th need ready cash and therefore, dispose of the produce of differe pickings immediately after drying and at some places, ev before drying. Secondly, the requirements of their families a limited and a small quantity is enough to last them for a wh year. Even so, they do not reserve enough to last them f more than a few months, as chillies deteriorate and lose in quali after a few months' storage. Big producers, however, sometim hold back their stock in expectation of better prices later. Th usually keep the stock in bulk or in gunny bags, in well-ven lated, dry rooms or in verandahs.

In the Madras State, family requirements, which usually not exceed 20 seers of chillies per annum, are generally stor in earthen pots with lids. Baskets made of palmyra leaf a split bamboo are also used for the purpose. In the Bombay Sta small producers keep small quantities for their own use in a handy receptacle, while they sell off almost all the produce eith fresh or immediately after drying it. Well-to-do producers, ho ever, store the produce in a room or verandah till the pric are favouable.

In Madhya Pradesh, the produce is kept in an open heap or ny bag or in big baskets locally called "*Dala*" or in *gis*". The last mentioned receptacle is used only for long age. It is round in shape and is prepared from cotton stalks plit bamboo. The inner and outer sides are plastered with ick layer of mud and cowdung mixed together. The recep- e is placed on a high level free from ground moisture or on ooden stand. The *kangi* after being filled is sealed up with l and cowdung mixture. The *Kangi* is defective, in that y time a part of the produce is removed, the whole stuff to be taken out for sprinkling water to avoid breakage. In ar, small producers do not store chillies. A few big zamin- , however, hold back their stock in expectation of better es later. Chillies are packed in bags and kept in a dry room, erably over straw and mats or on a raised platform made of boos. Occasionally, chillies are taken out for exposure to sun, especially after cloudy weather. Uttar Pradesh is a cit state in so far as chillies are concerned and the producers erally do not store any appreciable quantity of the produce. he Punjab very little is stored by the producers for commer- purposes. Household requirements are stored in old gunny s, baskets or earthen pots. If comparatively large quantities to be stored, then they are either heaped in a dry corner of e room or put in old gunny bags, if available.

In Assam, chillies are stored in bags which are kept on raised dry floors or on wood or bamboo platforms, away from sun- e. In Orissa, the use of earthen pots is more common ough split bamboo baskets and sometimes, gunny bags are used. In West Bengal, small producers dispose of their pro- e immediately while big ones store it in earthen jars or boo baskets. The mouths of jars are sealed off with mud le the baskets are covered tightly. Chillies stored in baskets e to be exposed to the sun at regular intervals of 2 to 3 weeks void deterioration. In Hyderabad, producers pack chillies "*Andkas*" after drying them. The "*Andkas*" are placed in n, airy rooms or verandahs for the period required for dis- ng of the produce. The producers try to sell it off as quickly ossible.

In the Mysore and Patiala and the East Punjab States Union, producers store their produce in open heaps. Bags are also on some occasions.

(*b*) *By village merchants.*—Gunny bag is the most common ptacle used by the village merchants for storing chillies, as handy for storage and also as a container, when the produce be sent out. Green chillies are not stored for a period more n what is absolutely necessary for marketing them, say a or so. In the meanwhile, they may be kept in a heap or baskets on a dry floor. Dry chillies, however, may be re- ed for longer periods.

In the Madras State, village merchants do not usually ke chillies for more than a week. They took the Stock in gun bags or loose on a damp-free floor. In the Bombay State al the petty merchants dispose of the produce as quickly as possib and avoid long storage. Some of them, however, use gunny ba or mat containers, as in Byadgi area. In Madhya Pradesh, t use of gunny bags is common and the village merchants pla pieces of wet gunny cloth over the stacks of chilli bags in t dry weather, to avoid damage and loss due to driage and shrin age. In Bihar, village merchants try to dispose of their sto as soon as possible. If, however, they have to store it, the meth adopted is the same, as in the case of producers.

In Uttar Pradesh, village merchants use gunny bags f storing chillies. In the Punjab, village merchants use old gun bags for storing chillies or heap them up in different corners a room. In Assam, the system of storage adopted by the villa merchants is the same as that of the producers. In Orissa a West Bengal gunny bags are used, if storage is necessary f sometime. In the Hyderabad State, village merchants try dispose of their stocks as quickly as possible. For the peri that the stock remains with them, they store it in *andkas*, ju like the producers.

In the Mysore State, gunny bags are commonly utilised wh date-palm leaf mats are also used.

(*c*) *By wholesalers.*—The wholesalers buy large quantiti of chillies and store them over fairly long periods, distributi the stock as and when favourable prices are available. The m common container used by them for storage is the gunny ba

In the Madras State, wholesalers keep the bags in well p tected, ventilated and damp-free godowns. They frequen examine the stock to assess damage due to moisture and ins pests and sort out the damaged stuff as and when necessa The damaged lots are disposed of immediately. In the Bomb State, gunny bags as well as *Toddy*-mats are used for stori chillies. The latter are preferred due to lower cost, but gun bags have to be used, as the purchasers from other mark insist on them. In Madhya Pradesh and Bihar, the methods storage adopted by the wholesalers are the same as practised the village merchants in the two States. In Uttar Pradesh, gun bags are commonly used for storing chillies. The bags are stack in dry godowns. In the Punjab, wholesalers store dry chill invariably in old gunny bags in godowns or at their shops, b sometimes they are also stored loose in the form of heaps in c well ventilated godowns.

In Assam, methods of storage adopted by wholesalers a the same as those of producers and village merchants. In Oris gunny bags are used for storing dry chillies. In West Beng the wholesalers keep their stock in gunny bags on a raised pl form made of bamboos. In the Hyderabad State, wholesal

re the produce in *andkas* or verandahs of their houses or in ops. The *andkas* are stacked in rows, one above the other. A tle space is left between different lots of *andkas* to allow free culation of air. In the Mysore State, the wholesalers store llies in bags or date-palm leaf mats, just like the village rchants.

(*d*) *By retailers.*—The retailers generally purchase only that uch quantity which they are able to dispose of quickly, say thin a week or two. Hence they do not need any special orage arrangements. They keep the chillies in gunny bags, al-wood boxes, empty kerosene oil tins or any other suitable ceptacle, depending upon the quantity involved.

(3) COST OF STORAGE BY DIFFERENT METHODS AND LOSS IN WEIGHT.—(*a*) *Cost of storage by different methods.* As stated in the preding pages, storage of chillies is neither expensive nor elaborate. orage for some months is done only by the wholesalers in their vn godowns and they stock other commodities also in the same ace. Generally, old gunny bags are used while at certain places *oddy*-mats or date-palm leaf mats are also used. So the cost nsists mainly of the price of gunny bag and the godown rent, ough sundry items like hauling, unloading, stitching and re-ying, etc., may be included. New gunny bags cost about s. 175 to Rs. 200 per hundred while second-hand ones st about Rs. 100 or more per hundred. The godown rents vary om place to place. In the Madras State, the godown rent is stimated to be about 2 annas per bag of 50 lb. per month and e total cost of storage including bagging and stitching comes o Rs. 1-14-6 per maund. In the Bombay State, it costs 1 to 4 nnas to store a *toddy* mat container of 140 to 168 lb. capacity or a month at Byadgi, while at other places it costs 1 anna per ag weighing from 18 to 34 seers per month. The *toddy* mat ontainer costs 12 annas while a second-hand gunny bag costs bout Re. 1. So the cost of storing in the Bombay State ranges rom Re. 0-7-9 to Rs. 2-1-6 approximately. In Bihar, it costs bout Rs. 1-7-6 to store one maund of chillies for a month. The harges include the cost of containers, rent, handling, etc. In Uttar Pradesh, average storage charges exclusive of the cost of bags are 2 annas per maund per month. In the Punjab, it is ustomary to take bags also on hire, as they cost too much. The usual rent is 1 anna per bag per month. The total cost of storage aries from Re. 0-4-6 to Re. 0-8-9 per maund per month. In Orissa, the cost of storage is estimated to be Re. 0-6-0 per maund er month. In the Hyderabad State, storage charges vary from pies to Re. 0-2-3 per maund per month exclusive of the container. In other States also, the conditions are, more or less, the same as mentioned above.

(*b*) *Loss of weight in storage.*—Loss of weight in storage depends upon the period for which chillies are stored and the moisture content at the time of storage. If chillies are properly dried before storage, the loss in weight is very small, otherwise

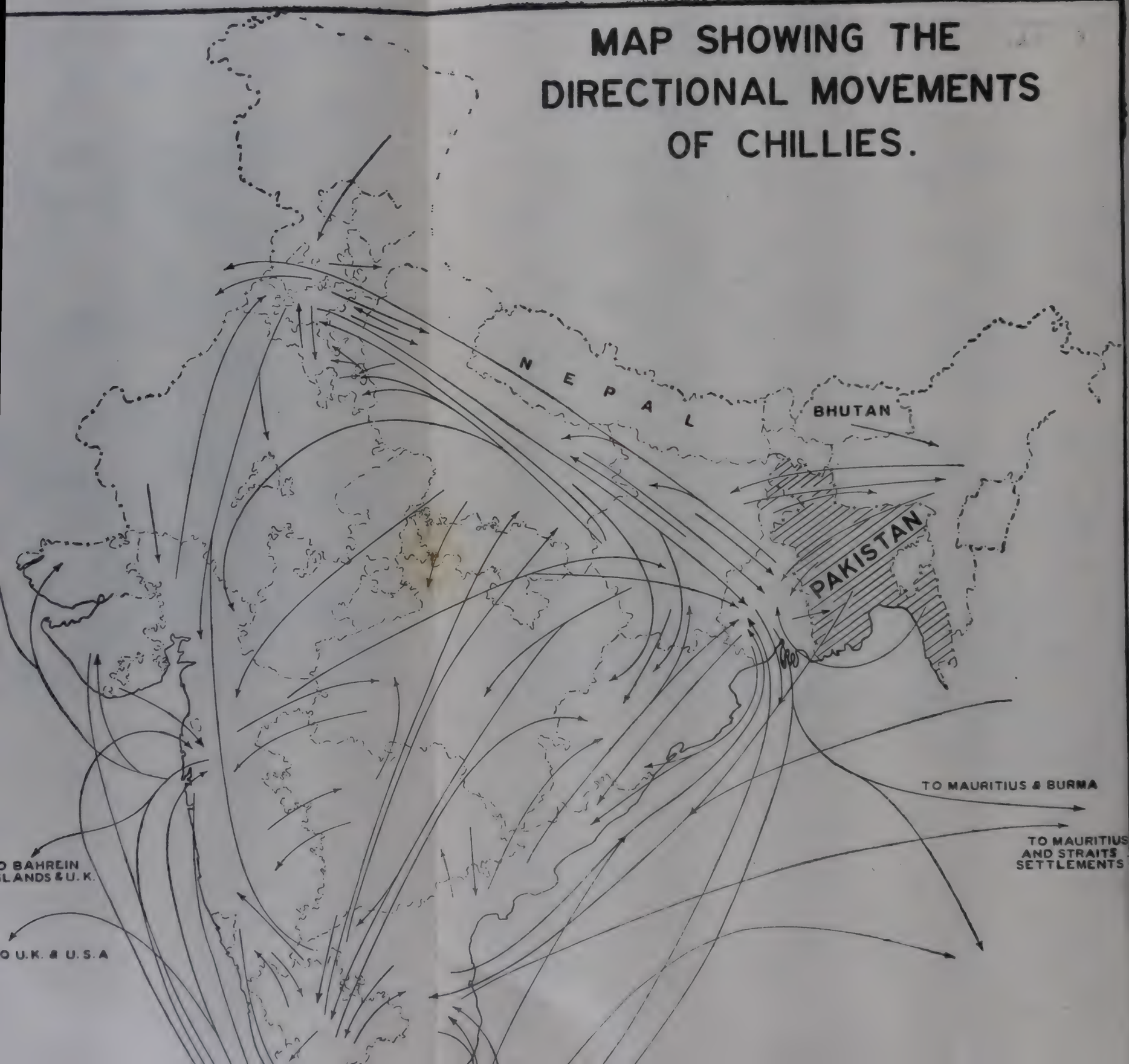
it is bound to be more. The loss of weight in dried chill varies from 2 to 10 per cent in about 6 months storage, dependi upon the factors mentioned above. The average loss is abou per cent. The loss is kept down by sprinkling water at regu intervals to avoid breakage on account of over-drying.

(4) STOCKS-SEASONAL VARIATIONS.

The stocks of chillies are naturally heavy in t period following the harvest and there is brisk dist bution in the first three months or so. Thereafter, the suppl come down and there is an even distribution for the remaini period, till the next season. The carry-over from one season another is negligible as the old crop does not find a ready mark when the new crop comes in. Secondly, as mentioned earl elsewhere, the quality of chillies deteriorates with time. The fore, long storage is neither desirable nor practised. In Madr 60 per cent of the produce is marketed during the period, Se tember to February. In the Bombay State, the stocks are hea in the period from November to March. In Madhya Prade the new crop starts coming in, in November and the stocks a heavy in the months of December to March. The stocks are their lowest at the end of the hot season.

In Bihar, the supplies are at their maximum in Februar March. In Uttar Pradesh the stocks are at their maximum duri November-December. In the Punjab, the peak period lasts fro October to January. In Assam, the stocks are heavy fro December to April and 60 per cent of these are sold during t spring and summer months. In Orissa, the busy months a from February to April. From May onwards and during t monsoon the stocks are low. After September, there is a te dency to stock enough quantity to meet the regular dema during the winter months. In West Bengal the stocks are hi during the months, April to July, when heavy purchases a made at the assembling markets. In the distributing marke the supplies are well regulated throughout the year. In t Hyderabad State, supplies are abundant from February to Ma In the Mysore State, January to March is the period of hea stocks. In the other producing areas also, the peak period stocks depends upon the period of harvesting, as the form follows the latter in the normal course.

MAP SHOWING THE DIRECTIONAL MOVEMENTS OF CHILLIES.



CHAPTER VIII—TRANSPORTATION

(1) PRODUCE MOVEMENT—DIRECTIONAL AND QUANTITATIVE WITH EFERENCE TO THE CHIEF PRODUCING AND CONSUMING CENTRES, INCLUDG INTRA AND INTER-STATE TRADE.

Movement of the produce consists mainly of dried chillies. reen chillies are mostly consumed near the areas of production and only insignificant quantities are sent over long distances.

The inter-State trade, therefore, consists mainly of dried illies. Imports into different States depend upon such factors increase or decrease in the local production, supply and demand, transport facilities, etc. Hence there is a lot of variation exports and imports from year to year. The directional ovements of chillies are illustrated in map facing this page nd are discussed below:

Madras.—Chillies are produced all over the State but some the districts have surplus production while others are in short pply. The movements of chillies inside the State, therefore, re from surplus districts like Guntur, East Godavari, Kurnool nd Anantapur to deficit areas of Chinglepet, Chittoor, South rcot, Malabar, Niligiris, Tanjore, North Arcot, South Canara and ne Madras City. A part of the requirements of Malabar and ne Madras City is also met from Tirunelveli, Ramanathapuram, ne Madurai districts. In short, the main intra-State movements re from the northern circars and ceded districts to the southern nd south-western districts. The quantity moving from the rplus areas to deficit areas within the State is estimated to e round-about 1,000,000 maunds. The Madras State is self-fficient, in so far as chillies are concerned, but imports are ecessary to meet the demand of the population for particular arieties produced elsewhere and also to make up for the quanities exported to foreign and Indian markets. Some imports are, herefore, made into the State every year depending upon the actors mentioned above and local production. In addition to ne usual imports from other States, small quantities of chillies, ot exceeding 3,000 maunds, are sometimes imported by sea from Burma, East Pakistan etc.

Imports through the coastal routes are fairly heavy. Such mports were only about 10,000 maunds in the year 1942-43 but hey increased steadily and were about 233,500 maunds in the ear 1946-47, undivided Bengal supplying from 66 to 83 per cent. Smaller quantities are received from Bombay and Saurashtra orts. Since 1947-48, however, coastal imports have been on he decline again and 22,218 maunds only were imported in 1949-0. Average annual coastal imports during the 5 years ending 949-50 are estimated to be 131,200 maunds.

Imports by rail and road are mainly from Bihar, West Beng and Bombay but smaller quantities also come from Madh Pradesh, Hyderabad, Mysore, PEPSU, Travancore-Cochin e These imports are irregular as the following figures will show

	Maunds
1942-43	92,400
1943-44	4,900
1944-45	57,900
1945-46	49,000
1946-47	61,190
1947-48	151,833
1948-49	29,085
1949-50	22,139

A major proportion of the imports is received, over Eastern Railway.

The Madras State exports chillies mainly to Bombay, Trav core-Cochin, West Bengal, Mysore, Madhya Pradesh and overs markets like Ceylon. Annual exports before the war were ab 270,700 maunds, of which about 128.000 maunds were sent Ceylon and about 6,700 maunds to other foreign markets l the United Kingdom, Mauritius, Straits Settlements and United States of America. The balance was distributed adjoining States like Travancore-Cochin, Hyderabad, Mys etc. From 1942-43 onwards, however, exports have been irre lar due to abnormal conditions created by the last world v Exports by sea ranged from about 238,500 maunds in 1942-4 51,624 maunds in 1948-49. In the year 1949-50, 113,711 mau of chillies were exported by sea. Average annual exports sea during the 5 years ending 1949-50, are estimated to be 78 maunds. Exports to Ceylon are generally made from Dhanu kodi and Tuticorin ports and consist mainly of the produce Tirunelveli, Ramnathapuram and Madurai districts. Chillies also sent to different parts of India by coastal routes.

The exports by coastal routes were on the decline during war years, so much so, that no chillies were sent out in year 1945-46. Small quantities were sent out in the next t years. There were, however, very heavy coastal exports in year 1949-50, when 132,094 maunds were sent out, mainly West Bengal and Bombay. Average annual exports by coa routes, for the 5 years ending 1949-50, are estimated to be 2 maunds. Exports by rail and road were about 142.000 mau per annum up to the year 1942-43, but declined sharply in following years, being only about 15.300 maunds and 21 maunds in the year 1945-46 and 1946-47 respectively. A m cause of the decline in export of chillies was the restric imposed by the State Government in 1944-45. With the rel tion of the restrictions, the position improved again and in

ar 1949-50, over 178,000 maunds were exported by rail and ad. The main destinations are Bombay, Travancore-Cochin, lhi, West Bengal, Madhya Pradesh, Orissa and Uttar Pradesh.

Bombay.—Chillies are grown extensively in the Bombay ate. Dharwar, Belgaum and Khandesh are surplus districts the State. Sangli, Kolhapur and Akkalkot are the main sup-ers of chillies to the Deccan and coastal region. The coastal tricts obtain most of their requirements from the Belgaum-arwar zone and the Southern Maratha tract. Nasik is sup-ed by Khandesh and Sangli and the average imports are about 00 maunds per year. Poona imports about 20,250 maunds of y chillies and 24,700 maunds of green chillies from Akkalkot, ngli, Sankeshwar and Nandurbar from within the State. Out this about 30 per cent re-exported to the Bombay City. Jalgeon ts about 1,300 maunds of dry chillies from West Khandesh. holapur imports about 13,700 maunds of dry chillies per annum om Bijapur, Akkalkot, Nandurbar, Nipani, Sangli and Byadgi. per cent of the requirements of Dharwar and Hubli are met Byadgi area. The Bombay City imports chillies from almost l the important distributing markets within the State and so re-exports them into the interior and deficit areas.

Imports into the Bombay State, are mostly by coastal routes, il and road and a very small quantity by sea. There were no nports by sea during the year 1945-46. In the year 1946-47, owever, 167 maunds of chillies were received from abroad, out which 109 maunds came from Egypt and 58 maunds from den and Dependencies. Imports by sea during the next three ears ranged from 136 maunds to 1,371 maunds. Average annual xports by sea are about 450 maunds. Imports received through oastal routes are of fair proportions, the annual average for the years ending 1949-50 being 30,519 maunds. These imports were ie lowest in the year 1948-49, being 19,277 maunds, and highest 1946-47, when 40,211 maunds were imported. In the year 949-50, 38,794 maunds were imported through coastal routes. bout 71 per cent of the coastal imports are from Saurashtra orts while about 21.8 per cent come from West Bengal. Small uantities come from Madras and Portuguese ports also. Till ie partition of the country small quantities used to be imported rom Sind (West Pakistan) also, through the coastal routes. uthentic statistics regarding imports, by rail and road into the ombay State are not available, but estimates show, that on e average, about 420,000 maunds of chillies are imported every ear. A very large proportion of this is made up by imports om Madras, Bihar, Hyderabad and Madhya Pradesh. Small uantities come from Uttar Pradesh, Patiala and the East Punjab States Union, Rajasthan, West Bengal and Saurashtra. The mports are directed mainly to Bombay and Ahmedabad districts. Smaller quantities are received in Poona, Sholapur, East Khandesh, Surat, Kaira district, *etc*. These imports are received mainly by rail. Imports by road are insignificant.

Exports from the Bombay State are also by sea, coasta routes, rail and road. Exports by sea averaged about 26,00 maunds, during the 5 years ending 1949-50. If, however, post partition period only is taken into account, then the averag annual exports by sea are about 38,500 maunds. Before th partition of the country, Ceylon was the main destination, bu since then Pakistan is receiving most of the exports by sea fror the Bombay State. In the year 1948-49, Pakistan imported 20,76 maunds out of 22,690 maunds exported by sea from Bombay. I the following year it got 47,516 maunds out of 54,147 maund Ceylon received a major portion of the balance. Very smal quantities are sent out to other countries like Bahrein Island Strait Settlements, Middle East countries, Australia, United King dom, *etc.* Average annual exports by coastal routes during th 5 years ending 1949-50, were 26,189 maunds, out of which 17,30 maunds went to the Madras State. The balance was exported t Foreign Konkan, Travancore-Cochin, Saurashtra, Cutch, *etc* Maximum coastal exports were recorded in the year 1945-4 when 40,894 maunds were sent out, Madras receiving 35,87 maunds. They declined to 11,592 maunds in 1947-48, bu improved to 29,266 maunds in the following year. In the yea 1949-50, 22,629 maunds were exported by coastal routes.

As in the case of imports, no reliable data are available i regard to exports of chillies by rail and road. Exports by roac however, are insignificant. Chillies grown in the Khandesh an Karnatak belt of the State are exported by rail and road t Madras, Bihar, Punjab and West Bengal. The States c Saurashtra, Hyderabad, Uttar Pradesh, Madhya Pradesh an Mysore also import chillies from the Bombay State. Nandurba and Dondaicha in West Khandesh, Byadgi and Sankeshwar i Karnatak and Sangli, Akkalkot and Kolhapur in the Decca area, are the chief exporting centres. These exports are esti mated to range from 150,000 maunds to 170,000 maunds pe annum.

Madhya Pradesh. — All the districts constituting Bera together with districts of Nagpur, Chanda, Bhandara and Wardh account for two-thirds of the total consumption of chillies. Th other districts consume the balance. The production of chillie is concentrated in Nagpur, Chanda, Amravati, Yeotmal, Buldana Wardha, Bhandara and Akola districts. Other districts, *viz* Sagar, Jabalpur, Mandla, Hoshangabad, Betul, Chhindwara Balaghat, Drug and Raipur have to depend on the districts men tioned above to a certain extent to meet requirements. Howeve movements inside the State are not extensive.

Average annual imports of chillies into Madhya Pradesh ar estimated to be 136,300 maunds which are received mainl through rail. The main importing centres are Nagpur, Raipur Bilaspur and Jabalpur. Nagpur alone receives more than 5 per cent of the total imports while the balance goes to othe markets. It is estimated that about 64 per cent of the import are from Bihar, 10.5 per cent from the Hyderabad State, 6.6

cent from the Bombay State and 18.9 per cent from other tes.

Exports of dry chillies from Madhya Pradesh are mostly by and are estimated to be only about 17,400 maunds. They directed mainly to the sea-ports, particularly Bombay. Over per cent of the exports take place from the Berar area. The st important exporting centres are Ellichpur and Malkapur.

Bihar.—Chillies are extensively produced all over the State the normal requirements of different areas are met mostly n the local produce. The production, however, is concened in the districts of Darbhanga, Monghyr, Muzaffarpur and na and small quantities move out from there to the outlying ricts like Saran, Champaran, Santhal Parganas and Singhm depending upon their deficit. Otherwise, there is little vement of chillies, inside the State except for the purpose of embling the produce in the important markets.

There are practically no imports of chillies into Bihar. casionally negligible quantities are imported by the traders o the outlying towns of Bihar, particularly Jamshedpur, anbad, Purnea, Forbesgunj, *etc.*, from West Bengal, Madras l Assam. The quantity thus imported is, however, too small e of any significance.

Exports of chillies on the other hand are heavy since Bihar duces much more than its requirements. It is estimated that ut 677,000 maunds of dry chillies are exported, on the average, ry year from Bihar. Exports take place mainly from bhanga, Monghyr, Muzaffarpur and Patna districts to markets Uttar Pradesh, West Bengal, the Punjab, Madhya Pradesh, hi, Orissa and other States. The share of different States in imports is estimated to be 30 per cent for West Bengal, 25 cent for Uttar Pradesh, 12 per cent for Madhya Pradesh, 5 cent for Delhi and 28 per cent for other States. The most portant destinations are Banaras, Allahabad, Kanpur, Rae reli, Aligarh and Agra in Uttar Pradesh ; Amritsar, Jullundur l Ludhiana in the Punjab and Calcutta in West Bengal. It estimated that on an average 70 per cent of the exports from ar are transported by rail, 20 per cent by road and the balance river.

Uttar Pradesh.—Kashipuri chillies are sent to markets like pur, Bareilly, Moradabad, Lucknow, Allahabad, etc., within State from the interior of the hills, from Sault, Someshwar, arahat, Lohaghat, Mohan, *etc.*, *via* Ramnagar. The produce conveyed by road up to Ramnagar and thereafter by rail. *li Kashipuri* chillies (*Dhanauri*) are brought to Sarkara, shipur and Bajpur railway stations by road from the producing as and from there transported by rail to markets like Kanpur, radabad, Bareilly, Chandausi, Aligarh, Shahjahanpur, cknow, etc. Kanpur is the biggest assembling and distributcentre for chillies in the State and as such most of the pro-

duce finds its way to this market. Chillies from Kheri distr
are conveyed by road to Lakhimpur and Paliakalan for despa
to neighbouring districts by rail. *Kairana* chillies produced
Kairana area are distributed over markets in the western distri
of Uttar Pradesh, *viz.*, Muzaffarnagar, Bijnor, Najibabad, Hap
Bulandshahr, Hathras, *etc.*

Imports into Uttar Pradesh consist mostly of dry chili
though very small quantities of green chillies are also receiv
during the summer months from Patna in Bihar and Calcu
(West Bengal). Dry chillies are imported on a fairly large sc
and the average annual imports are estimated to be about 200,
maunds. Out of this over 84 per cent comes from markets l
Patna, Samastipur, Tilrath, Beguserai, Hayaghat, Pusa Ro
Muzaffarpur, Darbhanga, *etc.*, in Bihar. Most of the bala
comes from Patiala, Sirhand and Nabha in the Patiala and
East Punjab States Union and Ambala and Amritsar in
Punjab. Small quantities are imported from markets l
Tughlaqabad and Okhala in Central India.

Uttar Pradesh being deficient in the production of chill
exports are negligible and are estimated to be only about 7,
maunds of dry chillies. Most of this quantity consists of *Kair*
chillies which are sent by rail from Shamli and Kandhala r
way stations to markets in Orissa and West Bengal, Small qu
tities are sent to Delhi by road. Kanpur markets re-exp
about 20,000 maunds of dry chillies on the average to mark
in the Punjab, Delhi, Bombay, Kathiawar and Madhya Prad

The Punjab.—In the Punjab, Karnal, Rohtak, Ferozepur
Jullundur are the main surplus chilli producing distr
Samalkha, Panipat, Ganaur and Gharunda in Karnal distr
Nur Mahal, Lohian, Malsian, Shahkot and Jullundur in Jullun
district ; Moga, Makhu, Guruharsahai, Mallanwala and Feroze
City and Cantonment in the Ferozepur district are the import
exporting markets, from where substantial quantities of chil
are exported by rail and road to deficit areas, both within
outside the State. Inside the State, Karnal district supp
chillies mainly to the districts of Hissar, Amritsar, Rohtak
Gurgaon. Smaller quantities go to other districts like Amb
Jullundur and Ludhiana. Chillies from the Jullundur dist
move to the deficit neighbouring districts of Gurdaspur
Hoshiarpur, though small quantities go to Amritsar, Hissar
Ferozepur districts also. Supplies from Ferozepur district m
mainly to districts of Hissar, Gurgaon, Jullundur, Hoshiar
Ambala and Gurdaspur. Ludhiana receives chillies from Pat
and re-exports small quantities to Hoshiarpur and Hissar
tricts. The surplus of Rohtak district is despatched mainly
markets outside the State, like Delhi *etc.* On the average 9
maunds of dry chillies move from surplus areas to deficit a
by rail inside the State. Approximately the same quantity m
by road.

The Punjab imports about 25,000 maunds of dry chillies ry year. Patiala and the East Punjab States Union accounts 30.7 per cent of the imports while Uttar Pradesh, Delhi and hmir State are responsible for 21.2, 18.6 and 0.8 per cent restively. Before partition about 28.7 per cent of the imports e received from the area, now constituting West Pakistan. ce the partition of the country, imports from Pakistan have ually ceased while those from the Kashmir State are on the rease. To make up the deficiency some quantities of chillies being imported from Bihar also. Imports from Delhi, consist nly of the Punjab and Uttar Pradesh chillies, which are reorted. Chillies from Uttar Pradesh and Delhi side are usually orted into the south-eastern districts and Amritsar, the main eiving markets being Hansi, Hissar, Bhiwani, Rewari, Hodal Ballabhgarh. Districts of Hoshiarpur, Ludhiana, Amritsar Jullundur get chillies from Patiala and the East Punjab tes Union. Kashmir chillies come mainly to Amritsar.

The Punjab exports about 100,000 maunds of dry chillies ually. Delhi is the main destination, its intake being about per cent of the total exports. Other important destinations West Pakistan, Uttar Pradesh and Patiala and the East Punjab tes Union which receive 24.0, 15.6 and 12.3 per cent of the al exports respectively. Small quantities are sent out to mbay, West Bengal and other States. Panipat, Ferozepur, epat and Samalkha are the important exporting railway stas, while Murthal, Ganaur and Gharaunda are the major rkets for exports by road. It is estimated that about 52.3 cent of the exports are by road and the balance by rail. ade with Delhi is mainly by road. The Punjab markets reort about 6,000 maunds of dry chillies received from Uttar adesh, Delhi and Patiala and the East Punjab States Union Rajasthan, Delhi, Himachal Pradesh, *etc.*

Assam.—Movement of chillies inside the State is not very rked, as the produce of one district hardly finds its way to other, on account of the limited and scattered nature of the tivation of the crop. Nowgong, Garo hills and Naga hills are major chilli producing areas which send out small quantities the produce to Gauhati and plains of the Upper Assam lley.

Assam imports about 85,000 maunds of dry chillies per year, which a major proportion used to come from East Bengal (East kistan) before the partition of the country. This deficiency rnet from other sources like Bihar, which constitutes the main urce of supply now. The balance is received from Bhutan. ost of the imports are by rail.

There are hardly any exports of dry chillies from Assam, but re than 15,000 maunds of green chillies are sent to West Bengal, ainly to Calcutta, by river.

Orissa.—The production of chillies is concentrated in Jeypore, unupur and Rayaghada in Koarput district; Angul and Banki

areas in Cuttack district; Nimapara in Puri district; Chatrap Parlakimedi, Rambha and Phulbani in Ganjam district. Chil produced in Angul and Banki move in small quantities Cuttack. Cuttack redistributes chillies produced locally a those received from other States to other consuming centres l Jeypore, Kendrapara, *etc.* Produce of Chatrapur and Parla medi is sent to Berhampur. Berhampur is the principal dis buting centre of the Ganjam district and almost all the consum markets in the district receive a part of their supplies from Chillies produced in Koraput district are despatched to consu ing centres in Ganjam district. Kurda Road serves as an imp tant distributing centre for markets like Puri, Parikud, Bar *etc.* The internal trade movements, however, are not heavy a in the remaining areas most of the demand is met from the lo produce or imports from other States.

Annual imports of dry chillies into Orissa are estimated range between 30,000 and 40,000 maunds. Supplies received fr Madras cover up to 60 per cent of the imports. Patiala and East Punjab States Union is responsible for another 20 per c while the balance is received from Bihar. The main import markets in the State are Cuttack, Berhampur, Bhadrak, Khu Road (Jatni), *etc.* Cuttack receives near about 20,000 mau of dry chillies per annum. Berhampur imports about 10 maunds while the balance is imported by the other mark Most of the imports are by rail and only about 3,000 maund chillies are imported by road.

There are no exports of chillies from Orissa.

West Bengal.—Production of chillies was concentrated in eastern part of undivided Bengal and important consum centres like Calcutta were fed from sources located there. Pa tion has left West Bengal a deficit area in so far as the proc tion of dry chillies is concerned. There is hardly any intra-S trade in dry chillies in West Bengal. However, green chi grown in Murshidabad district and in areas near about Calc move down to the latter place. Calcutta is the most impor consuming as well as distributing market in West Bengal an receives its supplies from different States like Bihar, Mad Assam, *etc.*, now that supplies from East Pakistan have pra cally ceased.

It is estimated that West Bengal receives an estim average of 1,168 maunds of dry chillies by sea every year, ma from East Pakistan and Ceylon. Imports through coastal ro range from 23,100 maunds to 108,300 maunds per annum, average being 65,700 maunds. It may be stated that only p partition period has been taken into account for arriving at t estimates. The main source of imports through coastal ro is Madras. Very small quantities are received from Bom Saurashtra, *etc.* The other most important source of im of chillies into West Bengal is Bihar and it is estimated about 81,300 maunds of dry chillies and about 5,000 maun

een chillies are received from there. Calcutta is the main ceiving centre, from where the chillies are redistributed over ner markets in the interior. Districts situated near Bihar, such Burdwan, Asansol, Darjeeling, Jalpaiguri, Malda, *etc.*, receive eir supplies direct. About 15,000 maunds of green chillies are ceived from Assam, mainly for consumption in big cities like lcutta. It is estimated that about 80 per cent of the imports om Bihar are transported by rail while the balance comes ainly by river. Chillies from Assam are transported invariably river.

Exports from West Bengal (mainly from Calcutta) are by a, coastal routes, rail and river and consist of the produce of ihar and other nearby States. On the average about 97,400 aunds of dry chillies are sent by sea, the major importing untry being Ceylon. Other destinations of lesser importance e Mauritius, East Pakistan, Burma, Australia, *etc.* About ,000 maunds of dry chillies are sent by coastal routes, mainly Madras. Very small quantities are directed to Bombay, rissa, etc. Exports by rail and river from West Bengal have windled down to insignificant proportions since the division the country. About 6,350 maunds of dry chillies are exported East Pakistan by rail and road. Another 5,350 maunds are nt to Assam and Bihar.

Hyderabad.—There are no significant or major movements chillies inside the State. The crop is grown extensively all ver the State and most of the districts produce more than nough to meet the local demand. Some of the districts like Baghat, Adilabad, Parbhani, Bir, Raichur, *etc.*, however, do not roduce enough to meet their requirements and small movements re noticed towards them from the neighbouring districts, which re heavy producers. These movements are not of commercial mportance. They take place mostly by road or rail.

Imports into the Hyderabad State are mainly from the States f Madras and Bombay, the major sources being Bellary in the Madras State and Dharwar in the Bombay State. As in the ase of other States, the imports are irregular. In the year 1942-43 about 17,650 maunds of dry chillies were imported but, thereafter, there was a gradual decline in imports on account of the estrictions on movements imposed by different States. Only 741 maunds and 2,833 maunds were imported in the years 1944-45 nd 1945-46, respectively. With the easing of the situation, mports increased heavily in the following year reaching the gure of 61,662 maunds. In the year 1947-48, 63,633 maunds of chillies were imported, followed by a steep fall in 1948-49, when 2,403 maunds only were received. On the average, imports are estimated to be about 62,600 maunds per annum. The period before the year 1946-47, was abnormal on account of the war. The steep fall in imports, in the year 1948-49, was due to the delay in accession of the Hyderabad State to the Indian Union, leading to unsettled conditions. Most of these imports are by

rail though small quantities come through the roads also. The main consuming centres are the Hyderabad and Secunderabad Cities, Raichur, Gulbarga *etc.* Green chillies are not imported into the State.

Exports of dry chillies were fairly heavy till the year 1942-43 the average annual figure being 240,000 maunds. The State Government banned free movement of chillies from January 1943, with the result that the exports declined to insignificant proportions, so much so, that 45 maunds only were sent out during the year, 1947-48. Exports have been low in the following years also. Under normal conditions, Godavari, Warangal and Gulbarga areas are the main exporting districts. The exports are made principally from railway stations like Tandur, Warangal Paddapalli, Dharmabad, Nizamabad, *etc.* The main destinations are Jalgaon, Chalisgaon, Chikli, *etc.*, in the Bombay State Buldana in Madhya Pradesh and important consuming markets in the Madras State. Small quantities are sent to the Mysore State also. There are some exports of green chillies also from the State but they are irregular. They were estimated to be as high as 46,600 maunds during the year 1943-44. Since then these exports have been on the decline, the estimated figures for the year 1948-49, being about 9,600 maunds only. These exports are directed mainly towards towns of the States situated on the borders of the Hyderabad State and transport is effected usually by road.

Mysore State.—Goribidnur, Javagalu, Challakere, Harihar Honnali and Shikaripur are the chief producing centres and movements of dry chillies take place from there to important consuming centres like Bangalore, Mysore, Kolar Gold Fields and other district headquarters. About 100,000 maunds of chillies are received at Bangalore and Kolar Gold Fields annually from Goribidnur, *etc.* About 40,000 maunds of Javagalu produce goes to Arsikere and on to Bangalore. The produce of Challakere moves to Tumkur, Sira, Pavagada, Jagalur, Bellary Ariskere Hosadurga, *etc.*, and the quantity thus moved is estimated to be about 35,000 maunds. About 20,000 maunds of chillies produced at Harihar are sent to Davangere. Honnali exports about 40,000 maunds of dry chillies to Davangere, Shimoga and Sagar Shimoga and Sagar draw another 10,000 maunds from Shikaripur These movements are mainly by road.

Imports into the Mysore State are mainly from Byadgi in the Bombay State and Guntur, Hindur and Satyamangalam in the Madras State. Small quantities are also imported from the Hyderabad State, Bihar and other areas, if the prices in the exporting markets of Bombay and Madras are high. The quantities imported vary considerably from year to year. For instance 64,707 maunds of dry chillies were imported during the year 1942-43 ; 15,104 maunds in the following year and 7,669 maunds in the year 1944-45. The imports of dry chillies during the years 1945-46 and 1946-47, were 20,911 maunds and 8,192 maunds

spectively. Average annual imports of dry chillies are about ,000 maunds out of which about 15,000 maunds are received r road. The main sources of supply, as stated earlier, are the ates of Bombay and Madras. Green chillies are also imported om the same sources and the quantity received is estimated be about 5,000 maunds on the average. The imports declined nsiderably after the year 1943-44, on account of restrictions posed by the State Governments, on free movement of chillies.

Exports from Mysore are directed mainly to Bombay, Madras nd Coorg. The export figures were as high as 73,996 maunds dry chillies in the year 1942-43, but thereafter, declined steadily uching the lowest level of 4,598 maunds in the year 1946-47. hey improved to 13,151 maunds in the following year. Average nnual exports are estimated to be about 25,000 maunds. Besides ombay, Madras and Coorg, some quantities go to Bihar, Orissa, ttar Pradesh, Rajasthan, *etc.*, About 15,000 maunds out of the 5,000 maunds move by road, the exports by road being directed ainly to Coorg. The balance is sent by rail. About 2,500 aunds of green chillies are also sent out per year, the main estinations being the same, as in the case of dry chillies.

Patiala and the East Punjab States Union. The main centres f distribution are Patiala City, Sirhind and Samana. The Patiala ity market handles about 40 per cent of the total produce of ne State, while Sirhind and Samana are responsible for 30 per ent and 20 per cent respectively. It is from these centres that ne produce moves in the direction of consuming centres in the State, as well as outside it.

Imports of dry chillies into Patiala and the East Punjab States Union are about 155,000 maunds per annum. The main ources are the Punjab markets like Ambala, Karnal, Ludhiana nd Ferozepur; Patna in Bihar and Delhi. Imports of green hillies are insignificant and do not exceed 50 maunds per annum.

Exports of dry chillies from Patiala and East Punjab States Union are estimated to be 200,000 maunds on the average per ear. The exports are directed mainly towards Uttar Pradesh, Madras and the Punjab. Small quantities go to Rajasthan, Bombay, West Bengal, *etc.* Major proportion of the exports akes place from the Patiala City market while small quantities re despatched from Sirhind and Samana. Most of the move- nents are by rail, though roads also play some part in the distri- ution of produce.

Major movements of chillies produced in the country have een described above. Movements of similar nature, though on smaller scale, take place in other areas also.

(2) Methods and costs of transport.

The movement of the produce occupies an important place n the marketing of any commodity. Without appropriate trans- port facilities it becomes difficult to ensure proper distribution

of the produce. Movement of chillies from the producing area to the consuming centres is effected by (*a*) road, (*b*) rail and (*c*) waterways. The most important mode of transport is the railway which plays a major part in the distribution of chillies over widely separated areas. Transport by road and waterways is confined to comparatively shorter distances.

(*a*) *Transport by road.*—Roads are essential for efficient marketing of the produce. The first journey of the produce has necessarily to be performed by road, irrespective of the destination, be it the assembling market or a railway station for onward movement to distant markets. A network of all-weather roads all over the country, is extremely desirable to facilitate movements of the produce from the producing areas to the assembling distributing and consuming markets. The roads which connect the producing areas to the main roads or assembling markets are in most cases *kutcha* and subject to complete inundation during the monsoons. For quick transport of the produce it is highly desirable to improve the village roads. There are various modes of transport, namely (*i*) head-loads, (*ii*) pack-animals, (*iii*) carts and (*iv*) motor-lorries and trucks. The extent to which these different methods of transport are utilised, depends upon the distance, from the producing area to the market, and the condition of the road. Conditions under which different means or road of transports are used in different parts of the country are discussed below :

(*i*) *Head-loads.*—Chillies are not carried usually as head-loads. If, however, the quantity involved is not too large, the produce may be carried in the form of head-loads from the farms to the producers' homes or to the weekly *hats,* if they are situated nearby. This system, however, is not common and is practised only in a few States like Bombay, Madhya Pradesh and Bihar. Generally no cost is involved as the producer himself and his family members or permanent employees do the needful. In the case of hired labour, however, the cost would come to about 4 annas per maund for a distance of a mile or two.

(*ii*) *Pack-animals*—Transport of chillies by pack-animals also is not common. Their use is restricted to a few areas only in Bihar, the Punjab and Patiala and the East Punjab States Union, but there too, only small quantities are transported by them over short distances. Primarily this is due to the fact that the pack-animals cannot carry large loads. The pack-animals usually used are donkeys, oxen and camels and their charges vary from 1 anna to 3 annas per maund per mile depending on the condition of the road and the total distance covered.

(*iii*) *Carts.*—Bullock-carts are the most popular mode of transport for journeys up to 25 miles or so and they are used extensively all over the country. Pony-carts are also in use in Uttar Pradesh and Patiala and the East Punjab States Union but their utility is somewhat restricted on account of smaller carrying capacity. A pony-cart carries only 8 to 10 maund

chillies as against 16 to 20 maunds carried in a bullock-cart. e charges are almost the same, *viz.* Re. 0-1-6 to 2 annas per und per mile. Bullock-carts are extensively used for con- ing chillies from the farm to the producers' homes ; from the ducing areas to the assembling markets and even to distri- ing markets if they are within a convenient distance. The ts are also used in the distributing markets for hauling the duce to and from the railway stations. The charges vary ording to the load carried, distance involved, the condition the road and prevalent competition. Moreover, the charges usually for a full cart-load varying from 16 to 20 maunds per bag which varies in weight in different States. These rges have been worked out on a maund basis for purposes comparison and are discussed below :

In the Madras State, average haulage charges from the rket to the railway station and *vice versa* are 1 anna per bag 37½ lb. *i.e.* about 2 annas 3 pies per maund, over a distance 1½ to 2 miles. The charges from the village to the assembl- markets over an average distance of 8 miles are estimated vary between 13 pies and 20 pies per maund. In the Bombay te, bullock-carts are quite commonly used in the producing as and assembling markets, like Byadgi, Dondaicha, *etc.* erage charges are 6 pies per maund per mile. Usually, how- r, the charges are quoted for full cart-loads. A full-cart-load chillies from Byadgi is charged @ Rs. 16 for a distance of 34 les and Rs. 8 for a distance of about 16 miles. Charges for e same weight for a distance of 12 miles from Sangli are Rs. 5 Rs. 7, while at Dondaicha transport by cart costs Rs. 6 over distance of 10 mlies. In Bihar, transport by bullock-cart ts 2 annas per maund per mile, on the average. In Uttar adesh the cost of transport by pony-carts and bullock-carts cies from 1 anna 6 pies to 2 annas per maund per mile. In Punjab, the use of bullock-carts is very common. The usual arges are 1 anna per maund per mile on *kutcha* roads and 6 9 pies per maund per mile on *pucca* roads. Camel-carts are o used in some districts like Karnal. The charges are the me as in the case of bullock-carts.

In Assam, the charges range from 2 to 3 annas per maund r mile. In Orissa, transport by bullock-carts is very common all the districts except Cuttack, where transport by boats canals is more popular. The cost of conveyance in the rural as is about 4½ pies per maund per mile while in the dis- buting markets like Cuttack it is 1 anna 6 pies for the same ght and distance. In West Bengal, transport by boats is more vogue than by bullock-carts. Cost of conveyance by bullock- ts is about 7 pies per maund per mile in the rural areas, ile in a big city like Calcutta it is 2 to 3 annas per maund r mile. In the Mysore State the cost of conveyance by bullock- rts works out to 1.5 to 3.4 pies per maund per mile, depending on the load, distance involved and the condition of the road.

In Patiala and the East Punjab States Union, transport charg by bullock-carts and pony-carts vary from 1 anna to 3 annas p maund per mile.

(*iv*) *Motor-lorries and trucks.*—Before the last world w motor-lorries and trucks were commonly used, for transporti the agricultural produce, upto a distance of 300 miles or mo particularly in areas, where good roads existed. Howev during the war years traffic by motor vehicles was gradual curtailed owing to non-availability of petrol and spare mot parts. Conditions are now improving, and it is hoped, th motor transport will become popular again, as it is preferr to railway transport for several reasons. Motor transport offe quicker service, and there is less handling during transit. T trucks are loaded at the consignor's premises, and delivered the consignee at his own premises, and as such, incidental charg at the despatching and receiving railway stations are dispens with. Moreover, in most cases, the owner of the produce or l agent travels free of cost, by the same truck or lorry, whi carries the produce, and thus ensures safe delivery of the co signment. Motor traffic is generally more expensive than ra ways, but even then it is utilised for the reasons stated abo and also to avoid the difficulties in procuring railway bookin and wagons. The cost of transport by motor-lorries varies fr place to place, but generally speaking, it is high for short distances and decreases proportionately with the increase in d tance. The charges in the Madras State are about 5.3 pies p maund per mile, while in the Bombay State they vary from pies to 8½ pies per maund per mile. In Madhya Prade transport charges have been fixed @ 2 pies per maund per mi In Uttar Pradesh the charges range between 6 pies and 1 an per maund per mile. In the Punjab, transport charges by mot lorries vary from 2.4 to 2.9 pies per maund per mile for a f truck-load of 80 maunds, while for smaller consignments t rates range from 2.8 to 4 pies per maund per mile. In Oris the average rate is 5 pies per maund per mile. In other Stat also, the cost of transport by motor vehicles is within the lim stated above.

(*b*) *By rail.*—Railways play an extremely important pa in the distribution of chillies, particularly to distant marke Dry chillies are generally despatched by goods train, while gre chillies are invariably sent by parcel vans in passenger trai or by parcel trains. Traffic by goods trains is usually in wag loads. The charges are made on the zone system and apply the through distance in booking from one railway to anoth Full details of charges, *etc.* are available in the Coaching Tar published by the Indian Railway Conference Association.

Loading and unloading of sundry parcels is done by t Railways, free of charge, but in the case of wagon-loads th operations are performed by the consignors and the consign respectively. The system by which freight charges are cal

ed by the Railways is somewhat complicated. In order to able the consignors to know readily, the freight charges to rious stations, it is highly desirable that some sort of ready koner, showing the charges per maund to the more important stinations is kept at a conspicuous place at each exporting tion.

(*c*) *By waterways*—Owing to the development of roads d railways in the country, transport of chillies, as of other ricultural produce, by waterways is not so popular.

Transport of chillies by waterways is confined to Bihar, sam, Orissa and West Bengal, in areas where road system is t yet fully developed. Some quantity of chillies is transrted by river from Bihar to West Bengal. Similarly, chillies om Assam come to Calcutta and other consuming markets, rough the waterways. In Bihar, the river Ganga passes rough the chilli producing areas, and the chillies produced areas north of the river have to cross it to reach assembling d distribution markets like Patna, Barh and Mokameh. ountry boats are utilised for the purpose and charges vary from anna 6 pies to 2 annas per maund per mile. Small quantities e sent by steamers to West Bengal and onwards to Assam. he charges made by steam-ship companies are according to the riff and no special rates are quoted for transporting chillies. he steamers, however, take comparatively more time to reach eir destinations and as they do not serve many important conming centres, their services are sparingly utilised for transorting chillies. In Orissa waterways are not used commonly r transporting chillies, except in the Cuttack district, where stribution is done by boats through the irrigation canals. The oat charges are about 3 pies per maund per mile. In West engal also, a lot of the distribution of chillies, in the interior done by boats, whose charges vary from 3 to 4 pies per aund per mile. Transport by boats is very cheap, but owing their slow movement, regular transport over long distance generally avoided, if alternative transport by road or rail is vailable.

From the foregoing discussion, it will be observed that fferent means of transport are used to suit local conditions. or instance, where there are no roads, human labour or pack nimals are made use of, for transporting the produce. Wherever, here are rivers and canals, they are freely utilised for the purses of transport, as freight charges of boats are comparatively wer than those of carts, and lorries, etc. But movement by oats is slow and that is a handicap against their common use.

On the road, the bullock-cart holds an unrivalled position r transport of the produce from the villages to the assembling arkets, especially where roads are *kutcha*. For transport by *utcha* roads, it is the cheapest and most suitable means of transort. Its slow speed, however, precludes it from long distance ransport

Motor trucks and lorries are taking an increasing share, i the movement of agricultural produce. The elimination of hau age to and from the railway stations, as well as of handlin during transit and consequently less damage, quicker servic and freedom from formalities and miscellaneous charges atte dant on booking and clearance of goods at the railway station are some of the reasons, which go to make transport by moto lorries more popular. Before the last world war motor lorri were providing a serious competition to the railways on som routes and were instrumental in bringing about reduced stati to station rates in several instances. These concessions wer withdrawn during the war period, owing to great increase i railway traffic and comparatively less competition from moto lorries. The main cause of setback in traffic by motor lorri was the short supply of petrol but with the improvement in th conditions, this means of transport is regaining its lost groun The actual freight charged by the railways between any tw points is generally less than by other means of transport, bu when the overhead charges such as cartage to and from th railway stations and other incidental charges are taken in account, transport by railways becomes rather costly. Howeve for transporting the produce over long distances, the railway hold and will continue to hold the most important position. is, therefore, very desirable that rail transport should be mad as economical and quick as possible.

IAPTER IX—GROWERS AND TRADERS ASSOCIATIONS

GENERAL

In the present day economy, the formation of asso-tions is very important from the point of view of safeguarding d promoting the interests of producers as well as the traders. ade practices are rather complicated and in some cases not ve-board and as such the existence of such associations is cessary to help their members in realising the best service and ces. In India, there is a paucity of such associations, mainly e to backwardness of the masses and their apathy to such dies.

(1) GROWERS' ASSOCIATIONS—THEIR ORGANISATION AND FUNCTIONS.

There are only a few associations of chilli producers in lia, and they exist mainly in the Bombay State.

In the Bombay State, there are six producers' co-operative ganisations dealing in chillies. These are (1) The Byadgi Co-erative Chillies Sale Society Ltd., Byadgi, Dharwar District,) The Tarapur-Chinchani Cooperative Chillies Sale Society d., Thana District, (3) The Cooperative Agricultural Produce le Society, Ltd., Sankeshwar, Belgaum District, (4) The lgaum Gardener's Cooperative Production, Supply and Sale ciety, Belgaum, (5) Nandurbar Cooperative Purchase and le Union, Ltd., Nandurbar, West Khandesh District and (6) e Sangli Shri Ganapati Cooperative Kharedi Vikri Society d., Sangli. Out of these the first two deal mainly in chillies. e Byadgi Society was registered in the year 1921, under the operative Act of 1912 and has following aims and objects:

(*i*) To sell chillies and other agricultural produce of the cultivators of Kod and Ranebennur circles of the Dharwar district for maximum price at minimum cost.

(*ii*) To encourage members to grow pure and high class chillies and other agricultural produce and to market them in the best possible condition.

(*iii*) To obtain and supply pure seed, packing material, etc., on indent system to members, and

(*iv*) To advance loans on the actual pledge of the agricultural produce.

The Karnatak Central Cooperative Bank Ltd., Dharwar, nances the society for successful conduct of its business, by dvancing cash credit and loans on open godown system. Besides e society raises fixed deposits at the rate of 4 and 4 11/16 per ent interest. The society advances petty crop loans to its embers, to be repaid at the next harvest with interest, in kind. Members as well as non-members sell their produce through e society. The following statement shows the quantity of

chillies handled by the society annually during the years 1940- to 1949-50.

Year	Quantity of chilli sold (in maund
1940-41	4384
1941-42	5880
1942-43	5943
1943-44	6624
1944-45	6612
1945-46	6982
1946-47	3426
1947-48	5193
1948-49	5973
1949-50	7477

The average turn-over of chillies in the Byadgi market one to two lac maunds and the society deals with about 3 to per cent of it. It does its business on commission basis but the are no other overhead charges as in the case of commissio agents. The society gets the produce weighed correctly an weigh bills are issued. For these reasons, the business of th society is on the increase, though not as much as it should b because upcountry buyers still effect their purchases through th agency of the local merchants. The fall in business in 1946-4 was due to poor crop and disturbed conditions.

The Tarapur-Chinchani Cooperative Chillies Sale Societ was started in 1929. It deals in green chillies only. The societ does not buy any chillies on its own account. Its members con sign their produce through it to commission agents in consumin markets like Bombay, Surat, Navsari, etc. The society acts as clearing agent for its members and helps in realising their due from the buyers. It is also responsible for arranging facilitie for transport of the produce. Since 1947-48, however, the societ has done practically no work.

The other four cooperative societies deal in chillies alon with other agricultural produce. The aims and objects of thes societies are similar to those of the Byadgi society, mentione above.

(2) Traders' associations—their organisation and functions.

Traders are better organised but they too do not have regis tered bodies with definite and set rules or bye-lays. A few trader associations exist in different States but they deal in severa commodities including chillies. They usually have subscribe fund and their organisations function for their general benefi Meetings are held as and when there is some apprehension o danger to the trade interests. At Byadgi, in the Bombay Stat however, there is an unregistered traders' association with

mbership of 80 traders. These traders deal mainly in chillies ugh they do business in other commodities also. The asso- tion settles the market charges and also arbitrates in disputes ween the members and those dealing with them. Of late, association has been instrumental in getting railway wagons tted to its members for transport of chillies, etc. This asso- ion has also helped in forming a Road Fund Committee, which as its aim, the improvement of feeder roads. This committee rges 6 pies per package to raise its funds. There is also an egistered association of traders at Sankeshwar and its objects to facilitate trade, to fix market charges and to settle dis- es. A fee of Re. 1 is charged for entertaining an application settling a dispute.

It will thus be seen, that there is a paucity of organised asso- tions both amongst the producers and the traders. It is irable that the formation of such associations should be couraged for safeguarding the interests of the producers as ll as of the traders.

CHAPTER X—FINANCE

(1) Financial requirements of growers, wholesale and reta merchants and other parties engaged in the chillies' trad

Capital is necessary to run any business of trade successful and it is equally so in the case of any agricultural industr Adequate provision of finance is of extreme importance if a crop is to be produced and marketed successfully. The financi requirements and resources of different agencies engaged in t production and marketing of chillies are discussed below :

(*a*) *Growers.*—Cultivators are seldom in affluent circur stances, and they are especially in need of help, at the time sowing a crop, and during the period that ensues, before it harvested and sold. In the case of chillies, however, the proble is not so acute. In Madhya Pradesh, Uttar Pradesh, the Punja Assam, Orissa and West Bengal area put under chillies by t growers is generally small and they meet the seed requiremen from their own stock and use manure sparingly. Small sca growers perform all the attendant cultural operations themselv hence no extra cost is involved. Moreover, in the case of chilli the producers start cashing in, immediately after the first pickin To meet their usual expenses, they depend upon other ca crops. For instance, in West Bengal, crops like paddy, coconu betelnut, etc., serve this purpose. In a very few cases, wh small scale producers require monetary help, they go to t commission agents, who advance them loans on the security the crop and on the condition that it will be sold through the An exorbitant rate of interest *viz.* 18 to 24 per cent is charg on such loans.

In States like Madras and Bombay, where chillies are pr duced on an extensive scale, the financial requirements of t producers are comparatively large and they take the help petty merchants, commisison agents or wholesale merchants, t meet them. But a condition precedent to the advance of loa by any of these parties is that the borrower must sell his produ through or to the creditor; in any case enough of it to repa the loan and interest. The usual rate of interest is 9 to 12 p cent per annum. The creditors usually take the advantage paying a low price for the produce when it is brought for sal and at the same time recovering the advance as well as t interest due on it. If no help is forthcoming from any of t three agencies mentioned above, the producers perforce, seek th help of money-lenders who generally charge exorbitant rates interest. Lately the Byadgi Cooperative Chillies Sale Societ Ltd., Byadgi, in the Bombay State, has started giving loans t its members at 9 per cent interest.

(*b*) *Petty merchants.*—Petty merchants usually do not store produce for long periods. Generally after purchasing the uce in the villages they dispose of it as quickly as possible, within a day or two or a week at the latest. They invest : own money for smaller deals but if the purchases are heavy, they do require financial aid. In that case commission ts or wholesale merchants finance them, on condition that produce will be sold through or to them. Generally no est is charged for short term loans but at some places in the bay State, commission agents and wholesale merchants ge as much as 15 to 20 per cent interest per annum. In the bay State, the Purchase and Sale Union at Dondaicha also ed petty merchants in that area, by advancing loans at 9 cent interest per annum, but the Union stopped doing this in year 1945-46, on account of insufficient funds at its disposal the risk involved. The members of the society are mainly vators of the tract.

(*c*) *Wholesale merchants and commission agents.*—The funcs of wholesalers and commission agents, more or less, lap each other. Their monetary requirements are naturally h higher as compared with those of the producers or petty ers. They purchase large quantities, store the same for ing periods and sell the stuff as and when prices are favour-. The sales may be on credit or cash depending upon the lesalers' relations with the buyers and the time involved. y have to pay the producers in ready cash, whereas the ers usually take some time to make payments. Moreover, lesalers and/or commission agents require funds to advance is to the producers and petty merchants. The wholesalers usually well-to-do persons but in times of need they take ns from banks on the security of the stocks lying with them. y also avail of the help of money-lenders, if necessary.

(*d*) *Retail merchants.*—Financial requirements of retail chants of chillies are not very large, as firstly, they purchase ntities which can be disposed of in a short period, and ndly, because they are given the stuff even on credit, proed they have established relations with the wholesalers. So, inarily they have enough to meet their normal requirements. erally they have running accounts with the wholesalers and ke payments immediately after selling off the produce.

(2) FINANCIAL FACILITIES, SOURCES, RATES OF INTEREST AND OTHER RGES

As stated earlier, producers depend mainly on petty rchants, commission agents or wholesalers for meeting their ncial requirements. The rate of interest varies from 9 to 12 cent per annum but it is usually much higher if the money borrowed from a money-lender.

The wholesale merchants and commission agents have erally enough resources of their own but whenever necessity ses, they take loans from money-lenders on varying rates of

interest or from banks on the security of stock lying with the
The banks usually charge from 6 to 9 per cent interest per annu

(3) Possibilities of organisation.

Generally speaking the cultivators are badly placed in m
ters to finance. The wholesalers and other such agencies w
advance loans to them charge high rate of interest and at t
same time ensure that the produce is sold through or to th
So they not only pay interest on the loan but also receive a low
price for their produce. In other words, they do not get t
market price, as in their transactions with their creditors, t
element of competition is absent.

It is, therefore, highly desirable that cooperative societ
of producers should be started in the different producing are
to cater to the financial needs of their members. Capital shou
be raised by issuing shares to members, to be subscribed in ea
instalments. These cooperative societies should be affiliated
a central bank in each State, to afford them financial standi
and security. They should issue loans at a low rate of inter
and recover the amount due at the time of harvest. The
societies should also undertake to provide their members w
good seed, manure and implements, etc., as well as organise t
sale side and help their members in disposing of their produ
on commission basis. The Byadgi Cooperative Sale Society
the Bombay State is doing good work in this connection. T
formation of such societies and running them properly will go
long way in removing the difficulties of the producers.

CHAPTER XI—MISCELLANEOUS

(1) Problems relating to cultivation, seeds, pests and diseases & improvement of types.

In this section, problems relating to the cultivation and pro-tion of chillies are briefly discussed and efforts have been de not to enter into technicalities of research which should l their proper place in books dealing with research work on llies. The main problems for the cultivator, however, are se connected with (*a*) cultivation, (*b*) seed, (*c*) pests and eases, and (*d*) improvement of types, and they are briefly cussed below :

(*a*) *Cultivation.*—Chillies can be grown on a variety of soils, vided they are well drained. Non-irrigated crop does well heavy retentive soils, while irrigated crop thrives on medium m soils. Four to five deep ploughings are enough to prepare land for growing chillies. Generally speaking, the thods of cultivation are not much different now, from what re in vogue several decades ago. The same old country ughs are still in use and no attention is paid to proper spacing rows and plants. Chillies grown in rows and properly ced yield more than those transplanted close at random in field. Chillies being an important money crop, manuring is ential, and 10 to 15 cart-loads (10,000 to 15,000 lb.) of farm d manure per acre should be applied. There is, however, a neral scarcity of farm yard manure and as such fertilizers and n-edible cakes should supplement it. A dose of 200 lb. of monium sulphate is recommended as top dressing with a basal e of farm-yard manure. Experiments conducted in Madhya adesh on chemical manures have revealed that a basic dose 60 lb. ammonium sulphate, 112 lb. of super phosphate and lb. of potassium sulphate per acre gives good results. It is wever, necessary to confirm these results by continuous experi-ntation. Anyway it is desirable that the methods of cultiva-n should be improved and the production of chillies as of other ps should be improved. The State Agricultural Departments n play an important part in achieving this end.

(*b*) *Seed.*—The use of only good quality seeds of improved es of chillies is essential for producing crops of superior ality and higher out-turn. Advantages of seed selection are nerally realised, but usually it is not practised. The producers ually keep seed from the previous crop for sowing in the next ason. Intelligent ones amongst them pick up well developed uits from typically high yielding plants for sowing purposes. me select good fruits from heaps after picking, while others st collect the seed that drops down in the drying yard during e course of drying the crop. The former is a better practice.

It eliminates diseased plants, particularly the virus affected on When the producers do not have any seed of their own or a in short supply, they purchase it from the petty merchants

Lack of selection and proper storage of seed leads to mixture of different types and susceptibility of the crop diseases right from the beginning. Considering the fact that very small quantity of seed is sufficient to produce enough see ings for large areas, the selection of first rate fruits from healt plants should not be a difficult task. These should be dri separately for seed. The use of any seed that comes in hand should be discouraged. The State Agricultural and Cooperat Departments should inculcate the habit of seed selection amon the producers in the first instance, and secondly introduce i proved varieties, as well as, ensure adequate seed supply of su varieties.

(*c*) *Pests and diseases.*—There are several pests and disea of chillies. The most common pest is the Thrip. Thrips inf the plants in large numbers and suck the sap of leaves and ste causing a reduction in the size and malformation in leaves. T plants lose in vigour and drop leaves and flowers and the o turn is seriously affected. The attack is more severe in d weather and diminishes in rainy season. Spraying with toba decoction has proved somewhat useful in checking this p Dusting with sulphur powder also does some good but grow Thrip-resistant varieties appears to be the only satisfactory so tion. White ants and aphids are also pests of some importar White ants can be checked by irrigation and hoeing. Only w rotted farm yard manure should be used and no stubbles or sta of the previous crop should be left in the field before sow or transplanting chillies. *Neem* and Castor cake act as repella and may be usefully utilised in checking white ants. Aph serve as carriers for virus diseases.

Amongst virus diseases of chillies, Mosaic is the most imp tant and its characteristic symptoms are mottling, curling reduction in the size of terminal leaves. An attack in the ea stage of life of the plants causes the dropping off of flowers, t directly affecting the yield. Attacks at later stages, howe are less harmful. Thrips, aphids and white fly are known be the most effective carriers of Mosaic viruses. Sulphur d checks the disease, as also delayed irrigation, because dry c ditions do not suit it. The best thing to do, however, is to rem and burn the diseased plants when they are noticed in the f while hoeing the crop. There are other diseases of minor imp tance like die-back, damping off, etc. It is desirable that Agricultural Departments should pay attention to the pests diseases of chillies, as of other crops, and not only evolve pro control measures and disease resistant types, but also popula them amongst the producers.

(*d*) *Improvement of types.*—The pre-requisite for the provement of a crop is selection. Some work on selection

n and is being done by the State Agricultural Departments l Indian Agricultural Research Institute, New Delhi. Segrega- n of strains had been carried out by the Indian Agricultural search Institute during the years 1924-28 and 52 strains were arated. Several improved varieties have been evolved of ich N.P. 46 and N.P. 46A are now being recommended for neral cultivation. Improved varieties of chillies used as vege- le are also available now. This work has also been in pro- ess in the States of Madras, Bombay, Punjab, Bihar, etc. Some the objects shoud be to improve the quality in so far as yield, e, colour, pungency, adhesion of calyx to the fruit and resist- ce to pests and diseases are concerned. In the Madras State, a w good types have been segregated and are under observation. the Bombay State, the main work is being done, at the chillies eeding centre at Hirakurur, in the Dharwar district. It con- ts of botanical survey of existing types ; isolation of high yield- g, better coloured and disease resistant varieties and testing of e existing promising types. The underlying object is to find t a few outstanding types and group them under convenient onomic groups. A few of the promising strains have been gregated and are being released for distribution to the pro- icers. In Madhya Pradesh and Bihar also, certain types have oved to be superior to others and are under further observa- on before being finally selected for general distribution.

It has been observed, that all the States have numbered their arieties serially. This naturally causes confusion when the uestion is considered for the country as a whole. It is neces- ry to integrate the work on a country-wide basis, and find out e best varieties by selection, as well as, through varietal trials. hilli though not important enough like some staple crops, is still valuable cash crop, and as such, warrants co-ordinated research n an all-India basis. It is for the consideration of the Indian ouncil of Agricultural Research and Central and State Agri- ultural Departments to take up this work on a co-ordinated asis at the Centre and the States.

(2) Weights and measures.

These have been discussed in detail in the different market- ng survey reports, that have been published so far. The subject , however, briefly discussed below:

Chillies are generally sold by weight and not by measure t these weights vary from place to place. The units of price uotations also vary from market to market. For example, in he Bombay State in the Byadgi area, the wholesale unit of price uotation is a " Nag " of 9 maunds of 28 lb. each. At Sankeshwar, he unit is an " Atki " of 8 maunds of 28 lb. each. In the Dondaicha area, green chillies are sold in maunds of 24 seers, while the maund for weighing dry chillies is of 16 seers. A "Palla" is of 120 seers and even the standard maund of 40 seers s also utilised. At Nandurbar the maund may vary from 15 to 20 seers. The conditions prevailing in other States are not much

different. This conglomeration of weights, naturally leads confusion when prices for equivalent weights are compared different markets. It is in the interest of the agricultural indu try as a whole, that weights and measures should be standardis all over the country. This would eradicate the evil of ext allowances in kind taken by the buyers, as well as, facilita comparison of prices in different markets without elabora calculations.

The present position in regard to standardisation of weigh and measures is that an act has been passed in Madras in Octob 1948. In Bombay, the Bombay Weights and Measures Act, 19 is in force. In Bihar, Weights and Measures Act has been passe In Uttar Pradesh, a Weights and Measures Act, 1947, has be passed. In the Punjab, the Weights and Measures Act, 1941, in force. In Orissa, an Act has been passed but such Acts a still to be enacted in West Bengal and Assam. Hyderabad, Mys and Patiala and the East Punjab States Union, have their ov Standard Weights Acts in force. In other States also, it intended to enact legislation to standardise weights and measur The actual position, however, is that apart from the absence legislation in several States, even in the areas where such leg lation exists, not much progress has been made towards t elimination of spurious and non-standardised weights a measures. It is absolutely necessary that there should be on one set of standard weights and measures in the whole countr and there should be prohibition in the use of nomenclature any unit of standard weight or measure, in price quotation fixation, except when its contents are equal to prescrib standards. This will remove the confusion about the units price quotation. For instance, at present even with t standardisation of weights, a unit of maund varies fr place to place, as in the Bombay State.

MMARY, CONCLUSIONS AND RECOMMENDATIONS

(a) Summary.

CHAPTER I—SUPPLY

The original home of chillies was tropical America and they e introduced into India somewhere about the middle of the h Century. Among the minor crops of India, chillies have a eminent position.

Separate records of area and production of chillies are not ntained in different States in India. It is, therefore difficult get an accurate idea of production.

The area under chillies in the Indian Union is estimated to 1,197,860 acres. Madras, Hyderabad, Bombay, Madhya desh, Mysore and Bihar are the most important chilli pro- ing States and together account for 88.9 per cent of the total a under chillies. A major proportion of the crop is produced ler *Barani* conditions.

There are numerous varieties of chillies produced all over country. Usually they are known after the name of the place their production. The most popular types in the State of dras, are *Guntur*, *Rajahmundry*, *Pattai* or *Sathur*, *Tiruvan- nalai* and *Golaporalu* chillies. In the Bombay State, *Sankesh- r—Angikashi*, *Sankeshwar* medium, *Masur* or *Byadgi kaddi*, *adgi Adatar* and *Dabi* or *Dabakai* are the most important mercial varieties of chillies. In Madhya Pradesh, *lkapur*, *Ellichpur*, *Bhivapur* and *Umrer* chillies are the best own varieties. *Rahri*, *Sitti*, *Patarki* and *Pattaniya* are the most portant varieties of chillies in Bihar. In Uttar Pradesh, *Desi*, *rakhpuri*, *Asli Kashipuri*, *Dhanauri* and *Lakhimpur* chillies the varieties most commonly grown. In the Punjab, *Nakli na*, *Chota Phal*, *Lamba Phal*, *Ferozepuri*, *Mianwal*, *Talwan i Amritsari* chillies command preference over other varieties. nilarly in other States, the important varieties are generally med after the place of production.

Chillies are utilised both in green and dried form. It is imated that green chillies are produced and consumed to the tent of over 7,987,400 maunds, while the total production of dry

chillies is estimated to be 9,915,900 maunds. Bombay, Hyderaba Madhya Pradesh and Madras account for 80.7 and 78.5 per ce of the total production of green and dry chillies respectively.

There are hardly any imports of chillies into India. Expor however, take place regularly and on the average are 186,5 maunds per annum, the main destination being Ceylon.

Estimated net available supplies are 6,959,700 maunds a 8,214,775 maunds of green and dry chillies respectively

CHAPTER II—DEMAND

The annual *per capita* consumption of chillies varies con derably from tract to tract. In the case of green chillies it rang from negligible quantities in Bihar and Punjab to 3.5 seers Hyderabad. The highest annual *per capita* consumption of d chillies *viz.*, 3.6 seers is in Hyderabad. Other heavy consume are Madras, Mysore and Bombay. The lowest consumptic is in Uttar Pradesh where insignificant quantities are consume A greater proportion of the requirements in different areas met from local production. The consumption of chillies in t producing areas is confined mainly to inferior stuff, while go quality produce is exported to urban markets.

CHAPTER III—PRICES

Authentic and adequate price statistics of chillies are n available. Generally no official records are maintained. some States, the local Food and Supply Departments publish wholesale prices of chillies along with other agricultural produc but they are found to differ from the actual market price Growers do not maintain any record of their sales. The co mission agents and wholesale merchants keep accounts of th transactions, but generally do not mention the quality and varic of the produce, sold by them. Hence, information on prices of a limited utility.

The prices of chillies show a definite trend towards an crease. The recent world war and the resultant inflationary co ditions have been a direct cause of the exorbitant rise in prices chillies as of other commodities. There was a general recession prices of chillies during the year 1944 and again in 1947 and 19 In the year, 1944, the recession was caused by restrictions impos on the free movement of chillies by different States, while that

years 1947 and 1948 was mainly on account of unsettled con-
ns in the country. Otherwise the prices have maintained an
ard trend.

Market intelligence is very defective in India. There is
lly any market in this country, where a systematic record of
vals, stocks and prices is maintained. The producers have no
ly means of knowing current prices, their trend, stock posi-
, etc. The commission agents and wholesale merchants keep
nselves in touch with the market conditions through corres-
dence but this method is not quick enough. Some newspapers
lish the prices of chillies, along with other commodities, but
information is usually out of date. The official publications
newspapers, however, do not mention the stock position or
trend of the market. It is necessary that the producers should
posted with the latest information regarding prices and stock
ition in different markets, to enable them to bargain for the
market value for their produce. The All-India-Radio can
der useful service in this matter, by disseminating the market
s all over the country, through a network of community sets.

CHAPTER IV—PREPARATION FOR THE MARKET

Preparation of the produce for sale in the market is an
portant operation. The condition and the quality of the
duce, in which it reaches the market greatly influence its price.
s, therefore, of utmost importance that different operations like
vesting and drying are performed in such a manner as would
uce losses to a minimum and ensure the arrival of the produce
the market in good condition.

It takes 3 to 10 pickings to harvest the chilli crop complete-
Unirrigated crop matures earlier but yields less and may be
mpletely harvested in 3 or 4 pickings. Irrigated crop, on the
ner hand, has a longer season and up to 10 pickings may be
cessary to collect the whole crop. In the case of dry chillies,
king is done only when they have acquired the charecteristic
or yellow colour. Only fully matured chillies retain good
lour and flavour on drying. Chillies are dried after picking
d it may take anything from 3 to 15 days to dry them, depend-
g upon the maturity of the crop and the intensity of the sun-
ne. Picking and drying of chillies are generally attended to
the members of the producer's family. If, however, hired
bour is employed, payment is made in kind varying from 1|8th
1|14th of the quantity picked, depending upon the condition
the crop and the prevailing prices.

The trade usually classifies the chillies into 3 or 4 grad depending upon the purity, colour, quality, etc., of the produ In some markets thickness of the skin, pungency and seed co tent are taken into consideration in classifying the produce. T main quality factors in chillies are colour, size, shape, seed co tent, pungency, presence of dirt and other foreign matter, dama and moisture content.

No grading is practised by the producers. They do, ho ever, remove discoloured, damaged and rotten chillies during t drying process. Village merchants do not do any grading. (the other-hand, they adulterate the produce with inferior stu The wholesale merchants generally sort out damaged and c coloured chillies before selling the produce or sending it t to consuming markets.

The most common container used for packing chillies is gunny bag. But other containers like *"toddy mats"* and *ana* are also used in Bombay and Hyderabad States respectively Green chillies are sometimes brought to the market in baske made of split-bamboos and wicker as well.

CHAPTER V—ASSEMBLING

Growers of chillies do assemble a part of the produce the selves and convey it to the periodical markets or the near wholesale market for disposal. Village merchants play important part in the assembling of chillies. They assem them both in the producing areas and the periodi markets. They may do it on their own or on behalf of t commission agents and/or wholesale merchants. In some Sta like Madras, Assam, etc., the wholesale merchants collect produce directly from the growers or from the village merchan Generally, however, they do not interest themselves in this asp of marketing. There are very few co-operative societies wh take interest in the chillies trade. In the Bombay State th are some societies dealing in chillies but their turn-over is ve small.

CHAPTER VI—DISTRIBUTION

Growers do not generally take part in the distribution chillies. Village merchants form an important link in the ch of assembling and distribution of chillies in some States Madras, Bombay, Bihar, etc., while in others *e.g.* Uttar Prade Orissa, Assam, etc., they do not take an active part. Commissi

nts and wholesale merchants form the pivot of distribution. re are no co-operative societies dealing in the distribution of ies.

There are no markets reserved for trade in chillies except in ry few places in Madhya Pradesh, Hyderabad and Patiala and East Punjab States Union. Generally the wholesale markets other agricultural produce serve for chillies also. Such whole- markets are found in nearly all cities, towns, dis- headquarters and even important villages. Periodical kets are also to be found in some tracts. Generally the olesale markets are privately owned, but in some States, some he markets are owned by local bodies. The owners of the s, generally have no control over the business methods, pre- nt in the markets. The layout and size of markets vary from e to place, according to conditions and requirements. Most he markets have *kutcha* court-yards surrounded by godowns. open space has no protection from the sun or rain. The l authorities merely look to the general cleanliness of the rket.

Units of sale vary from place to place and even though eights and Measures Act" has been promulgated in several tes, the pernicious old system continues to exist. There are nerous malpractices in the chillies trade such as faulty weigh- scales and weights, weighing more than the quantity actually d for, retaining samples without payment, faulty calculations, tponing payments, mixing old and new stock, etc., etc.

There is a great disuniformity in market charges, so much that even in the same state, they vary from market to market. e basis on which these charges are made, also vary from place place *i.e.*, in some markets they are charged on money value ile in others on maund or bag or even a cartload. In some rkets particular charges are paid by sellers while in others buyers pay the same. In some others, the same charges are ied on both the sellers and buyers. The usual charges are mmission and or brokerage, handling, weighing, charity, market octroi or terminal tax and other incidental charges. As stated ve, there is a great variation in the charges and numerous desirable business methods are practised. To remedy these ects it is desirable to regulate markets. There are regulated rkets in some States like Bombay, but their working is not very isfactory.

The share of the grower in the price paid by the consumer pends upon the number of intermediaries through whom the

produce has to pass before reaching the consumer, distance the consuming market from the producing area, prevailing c toms and market charges, etc. The larger the number of agenc through which the produce passes and the longer the distan the smaller is the share of the producer. The share of the p ducer varies from 54.8 to 77.7 per cent in the case of gr chillies, and 50.4 to 90.8 per cent in the case of dry chillies. increase the share of the producer it is necessary to regulate market charges, reduce the number of intermediaries and prov cheap and suitable means of transport.

CHAPTER VII—STORAGE

There is generally no glut in the case of chillies as sup and demand are more or less balanced. Moreover, chillies be kept in good condition for some months, if properly dried stored. Thus even when there are heavy supplies, the stock be held back for some time. The demand for chillies is practi ly inelastic, hence the distribution is regulated accordingly.

Storage plays an important part in the chillies' trade. Pro drying and storage have a direct bearing on the quality of produce. Producers generally do not store chillies. Big grov however, sometimes hold back their stock in expectation of be prices later. They usually keep the produce in bulk or in gu bags, in well ventilated dry rooms or verandah. Small quanti for home use are kept by the growers in baskets, bags or any ot handy receptacle. The most common container used by wh salers and others interested in the chillies' trade is the gunny b Chillies lose about 5 per cent in weight on the average, dur storage of about 6 months, Stocks are heavy immediately a harvest and there is brisk distribution in the first three mo or so.

CHAPTER VIII—TRANSPORTATION

Inter-State trade consists mainly on dry chillies. Imp into different States depend mainly on increase or decrease in local production, supply, demand and transport facilities. Madras State imports fairly large quantities from Bihar, W Bengal, Bombay, Saurashtra ports, Madhya Pradesh, Hyderal Mysore and Patiala and the East Punjab States Union. It exp 166,450 maunds of dry chillies per annum on the average. Ou this, 78,200 maunds are sent to overseas markets. Ceylon b the main destination. Very small quantities are sent to the for markets. The balance is distributed largely over Bombay. T vancore-Cochin, West Bengal. Delhi, etc. Smaller quantities sent to other States.

The Bombay State imports about 450,950 maunds of dry lies from important chilli producing States like Madras, Bihar, derabad, Madhya Pradesh etc. Smaller quantities are received n other States. Bombay State exports 26,000 maunds of dry llies on the average by sea, mainly to Pakistan and Ceylon. erage annual exports by coastal routes are 26,200 maunds, st of which go to Madras. Exports by rail and road are direct- mainly to Madhya Pradesh, Madras, Bihar, Uttar Pradesh, derabad, West Bengal, Mysore, etc. and are estimated to be out 160,000 maunds per annum.

Madhya Pradesh imports its requirements mainly from har, though smaller quantities are received from Bombay, derabad and other States. Exports from Madhya Pradesh are small proportions and are directed to sea ports; mostly mbay.

Imports into Bihar are of insignificant proportions while ports are heavy and are round about 677,000 maunds. The in destinations are West Bengal, Uttar Pradesh, Madhya Pra- sh, the Punjab, Orissa and Delhi. Smaller quantities are sent other States.

Uttar Pradesh imports chillies mainly from Bihar, Patiala d the East Punjab States Union and the Punjab. Small quanti- s are exported to Orissa, West Bengal, Delhi, the Punjab, Bom- y and Madhya Pradesh.

The Punjab meet its requirements by importing chillies from tiala and the East Punjab States Union, Uttar Pradesh, Bihar, lhi and the Kashmir State. It exports about 100,000 maunds dry chillies, the main destinations being Delhi, West Pakistan, ttar Pradesh and Patiala and the East Punjab States Union. nall quantities are sent to Bombay, West Bengal and other ates.

Assam meets its requirements by importing dry chillies om Bihar and Bhutan. There are no exports except for about ,000 maunds of green chillies to West Bengal.

Orissa, depends mainly on Madras for its requirements of illies and to a smaller extent on Patiala and the East Punjab tates Union and Bihar. There are practically no exports.

West Bengal does not produce much of dry chillies and has depend on imports which come mainly from Bihar and Madras. mall quantities are received from other areas. Exports from

West Bengal consist mainly of Bihar chillies, which are re-expo ed. About 97,400 maunds are exported by sea, the most i portant destination being Ceylon. Another 48,000 maunds a sent out by coastal routes to Madras, Bombay etc. Small qua tities are exported by inland routes, to Bihar, Assam and Ea Pakistan.

Hyderabad State imports small quantities of chillies, main from the Madras and Bombay States. Exports from the Hyde abad State used to be fairly heavy, but have been on the decli since 1943. The main destinations are the Bombay Stat Madhya Pradesh and Madras. Smaller quantities go to th Mysore State and other nearby areas.

Mysore State imports chillies mainly from the states of Bor bay and Madras. Smaller quantities are imported from Hyde abad, Bihar, etc. Exports from Mysore are directed mainly Bombay, Madras and Coorg.

Patiala and East Punjab States Union imports are mai ly from the Punjab, Bihar and Delhi. The State exports abo 200,000 maunds of chillies, the main destinations being Utt Pradesh, Madras and the Punjab. Smaller quantities are sent o to Rajasthan, Bombay, etc.

Chillies are transported by road, rail and waterways. Diff rent means of transport are used to suit local conditions. Bullo carts hold an unrivalled position for transport of the produ from the villages to assembling markets, especially where t roads are *kutcha*. Motor-trucks and lorries are popular f longer distances and on *pucca* roads. Railways hold the mo important position for transporting the produce over long di tances. Transport by railways, however, is not quick enoug and as economical as, that by road or water-ways. It is desirab that rail transport should be made as economical and quick possible.

CHAPTER IX—ASSOCIATIONS

In India there is a paucity of growers' associations, whi could look after their interests, and it is mainly due to backwar ness of the masses and their apathy to such undertakings. The are a few growers co-operative societies dealing in chillies in t Bombay State, but the business handled by them is of very sm proportions. Traders are better organised but they too gen rally do not have registered associations, with definite and s rules and bye-laws. It is desirable that the formation of suc

ociations should be encouraged for safeguarding the interests oth the producers and the traders.

CHAPTER X—FINANCE

The producers depend mainly on petty merchants, commis- n agents or wholesalers, for meeting their monetary require- nts. The rate of interest, usually varies from 9 to 12 per t per annum, but it is much higher, if the money is borrowed, m a money-lender. The wholesale merchants and commis- n agents take the help of banks or money-lenders, against the urity of stock lying with them.

CHAPTER XI—MISCELLANEOUS

Methods of cultivation are not much different now, from at were in vogue several decades ago. To have better crops, s desirable to adopt improved methods of cultivation.

Lack of selection and improper storage of seed lead to a xture of different types, and susceptability of the crop to eases and pests right from the beginning. It is necessary that ly good quality seed of improved varieties of chillies should be d.

There are several pests and diseases of chillies. The most rmful pest is the thrip. Others of lesser importance are white- ts and aphids. Mosaic is the most important virus disease. her diseases of minor importance are dieback, damping off, etc.

The pre-requisite for the improvement of a crop is selection. olation of strains was carried out by the Indian Agricultural search Institute during the years 1924-28 and 52 strains were parated. Since then, not much progress has been made though some States like Madras, Bombay, the Punjab, etc. the work ntinues. It is, however, necessary to co-ordinate the work ing done in different areas.

Chillies are generally sold by weight but the weights used different areas are neither similar nor standardised. There is us a great confusion in regard to weights. It is necessary to andardise the weights and measures in the interest of the agri- ltural industry as a whole. Several States have enacted legis- tion, standardising weights and measures, but the actual posi- on is that not much progress has been made, towards the elimi- ation of spurious and non-standardised weights and measures. is absolutely necessary, that there should be only one set of

standardised weights and measures, in the whole country, a there should be prohibition in the use of nomenclature of a unit of standard weight and measure, in price quotation or fix tion, except when their contents are equal to the prescrib standards.

(b) Conclusions and Recommendations.

(1) Statistics of area should be maintained separate Separate records of acreage and production of chillies are n maintained (pages 1, 2). It is, therefore, recommended that t State Governments should arrange for recording the area a production of chillies separately.

(2) Varieties of chillies should be systematically classified all the important producing areas.

There are numerous varieties of chillies, and most of t producing areas have local names for them, which cause a gr deal of confusion about their nomenclature. (pages 9, 10). is necessary to classify the varieties of chillies systematica Outstanding varieties should be tried in different States and production should be restricted to really good varieties. It desirable that there should be a planned and co-ordinated acti to standardise the varieties. Advantage should be taken of work already done by the Indian Agricultural Research Institu

(3) Need for improving market intelligence.

Authentic records of prices are not available in official p lications. Most of the growers are ignorant of arrivals and pri in the market and, therefore, do not receive the full market va for their produce (page 78). A system of marketing inte gence with regard to prices, stocks, arrivals and despatches chillies in all the important wholesale markets and produc centres will not only benefit the growers but will also tend to sp up distribution. It is, therefore, recommended that the State G ernments may take effective steps to provide for an effici Market News Service.

(4) Improvement in methods of sorting, grading and packi

The system of blending and adulterating chillies is q common in different markets in India. Some rough and re sorting is done by the wholesale merchants, but there is no sta ard classification of different grades (pages 82, 84). This res in a lot of confusion and also creates an opportunity for malpr tices. There is a possibility of adopting standard grades important commercial varieties of chillies, based on size, col

ture content, dirt and damage. The standardisation of ainers is a natural corollary to grading. Gunny bag is the economical and convenient container for chillies. It could standardised for packing a particular quantity of chillies. e 86). There is always, however, the danger of break- of chilli fruits in gunny bags in transit. This could be ced, by encouraging the practice of flattening the chillies, by pling lightly upon them, during the course of drying. It commended that the State Agricultural and Marketing Depart- ts should take up this work.

(5) Development of co-operative societies for assembling distribution of chillies.

Though some assembling of chillies is done by the growers, play no part in their distribution. Similarly there are very co-operative societies which do the assembling and distribu- of chillies (page 89). In order that the growers may be e to increase their share, in the price paid by the consumer, s desirable to organise associations of growers, which should l the produce of members, grade and pack according to variety quality and arrange for its sale directly or through reliable mission agents. It is recommended that the States Co-opera- Departments should explore this field of work.

(6) Desirability of regulating markets.

There are many difficulties which sellers and buyers have to counter in the markets. There are different methods of sale ich give ample scope for undesirable practices. Units of sale, ightment and weight also vary from place to place (pages 97,98).

There are numerous malpractices quite common in the rkets (pages 99,100). Market charges also vary consi- ably from market to market. It is extremely desirable t market charges and practices should be regulated, keeping in w the local requirements and peculiarities, and this can be done regulating markets in all important assembling and distribut- centres as has been done at a few centres in the Bombay State. this way, the share of the producer, in the price paid by the nsumer, can be increased. It is recommended that the State vernments should not only enact legislation on this matter but o enforce it strictly.

(7) Desirability of forming Growers' and Traders' Associa- ons.

In the present day economy, the formation of associato is very important from the point of view of safeguarding a promoting the interests of producers as well as traders. Tra practices are rather complicated and in some cases not abov board. Growers interests can be served best by the formation Growers' Co-operative Sales' Associations. Similarly, the trade can organise the trade better, by forming Traders' Association with definite rules and bye-laws. It is recommended that t State Co-operative and Marketing Departments should encoura the formation of such associations (pages 141 to 143).

(8) Arrangements for meeting the financial requirements the producers.

The producers have to pay high rates of interest, on mon borrowed by them from the money-lenders and commissio agents or wholesalers. In addition, they are bound to sell the produce through or to the person who has advanced the loa In consequence they do not receive adequate returns. (page 14 It is, therefore, highly desirable that co-operative societi of producers should be started, in different producing areas, cater to the financial needs of their members. Capital should raised by issuing shares to the members. These societies shou be affiliated to a central co-operative bank, to afford them secu ity and financial standing. These societies should provide loan on low rates of interest to their members, to be recovered aft harvest. The societies should also undertake to help their mem bers, in procuring good seed, manure, implements, etc. T State Co-operative Departments can do a lot of useful work, b tackling this problem.

(9) Introduction of improved methods of cultivation an encouraging the use of good quality seeds. Measures to figh pests and dieases and work on the improvement of types chillies.

It is desirable to introduce improved methods of cultivatio to produce good crops of chillies. Optimum doses of manu for applying to the chilli crop should be found out by experime tation. Similarly the use of good quality seed, of improve types of chillies, is a pre-requisite for producing good crop Control measures to check diseases and pests are also necessar Last but not the least important is the improvement of types chillies. The objective should be to improve quality in regar to yield, size, colour, pungency, adhension of calyx to the fru

resistance to disease and pets (pages 147-149) It is primarihe work of the State Agricultural Departments. They should y out experiments and evolve standard types of first class lies.

(10) Standardisation of weights and measures.

Although legislation has been enacted in several States in ard to standardisation of weights and measures, in actual prac- the position is far from satisfactory (pages 149 & 150). Nume- s weights and measures, of different size and capacity, are in all over the country. It is extremely desirable to strictly en- ce the standardisation of weights and measures in all the States, that one of the major causes of malpractices in the trade is noved. It is recommended that the State Governments should serious attention to this matter.

APPENDICES

APPENDIX NO. I

Estimated acreage under chillies in the main producing areas in India (1945-46 *to* 1949-50)

(Acres)

Year	Madras	Bombay	Madhya Pradesh	Bihar	Uttar Pradesh	Punjab	*Assam	Orissa	West Bengal	Hyderabad	Mysore	*Madhya Bharat†	PEPSU	Ajmer	*§Others	Grand Total
1945-46	290,500	172,100	80,700	51,200	24,000	25,100	16,400	19,800	12,700	233,900	66,900	17,700	13,400‡	1,000	2,000	1,027,400
1946-47	365,100	190,000	85,400	55,100	23,500	26,300	16,400	12,800	12,700	281,400	68,400	17,700	19,000‡	1,300	2,000	1,177,100
1947-48	365,300	209,000	103,500	54,100	29,200	26,600	16,400	14,300	10,100	335,000	70,100	17,700	21,500	1,700	2,000	1,276,500
1948-49	336,000	178,800	105,800	81,500	26,900	16,800	16,400	12,000	10,700	325,100	71,400	17,700	16,000	1,700	2,000	1,218,800
1949-50	313,800	233,500	114,100	73,600	28,600	33,300	16,400	12,700	10,500	326,800	83,800	17,700	20,600	2,100	2,000	1,289,500
Average	334,140	196,680	97,900	63,100	26,440	25,620	16,400	14,320	11,340	300,440	72,120	17,700	18,100	1,560	2,000	1,197,860

*As yearly statistics are not available, estimated average figures have been given.

†Gwalior only.

‡Average for Patiala only.

§Others—Includes States like Coorg (70 acres), Travancore-Cochin (200 acres), Delhi (50 acres) and other States for which no information is

APPENDIX NO. II

Description of important varieties of chillies produced in different States in India.

MADRAS

Orange type.—Fruits long (2-1|2 to 3 inches), apex k, heavily seeded, orange colour, calyx persistent, very gent, short and conical fruits as well as thin, long fruits with y margin are also met with.

Red type.—(*a*) thin, medium sized fruits (above 3 inches) ormly thick, wavy margin, bright red, calyx persistent or -persistent (*b*) short sized (2 to 3 inches), apex thick, vily seeded, calyx persistent or non-persistent (*c*) short-sized conical (upto 2 inches), persistent calyx, otherwise resembl- medium-sized chillies.

BOMBAY

Masur or Byadgi Kaddi.—Long, slender, thin skinned, blood seed content 40 to 42 per cent, pungent. **Byadgi adatar** is e or less similar to Kaddi.

Dabbi or Dabakai.—Long (4-1|2 to 6-1|2 inches) very broad thick, red to blackish red, less pungent with a peculiar our.

Tarapuri.—Short (1-1|2 to 2 inches), conical, tapering apex, gent, utilised in green condition.

Shirgaon.—Short (2 to 3 inches), tapering uniformly, less gent, utilised in green condition.

Gaorani.—Short (2 to 2-1|2 inches), broad, thin, red to deep heavily seeded (64 per cent).

Sherangli.—Long (6 to 7 inches) bright red, less pungent, dium sized Sherangli (3 to 4 inches) in pale-red and very gent.

Dhobli.—Medium (3 to 4 inches) bright red and less pungent.

Bhopli.—Medium (3 to 3-1|2 inches), red, heavily seed, pungent.

Surali.—Short (2 inches) and broad, fairly seeded and very gent.

Sindkhedi.—(i) Long (4 to 5 inches), slender, deep red, less ded and slightly pungent (ii) short, more seeded and pungent l yellowish-red in colour.

Lavangi.—Short (1 inch), slender, thin, yellowish-red, hly seeded, pungent.

MADHYA PRADEHS

Malkapur Gaurani.—Medium to long, thin skinned, red pungent, good yielder.

Malkapur Pongli.—Medium to long (about 2-1|2 inches) medium thick skinned, deep red, moderately pungent and good yielder.

Ellichpur kakni.—(*i*) Long, thin skinned, red, very pungent.

Ellichpur Dhamangaon.—(*ii*) Medium, thick skinned, red less pungent but a heavy yielder.

Bhiwapur or Botki.—Short to medium sized (about 1-1|2 inches), thick broad based, deep red, less pungent, poor yielder.

Yellow.—Medium sized, more seed than the red varieties yellow, very pungent.

BIHAR

Rarhi or Pattanaya.—Long, narrow, thin, red and very pungent.

Mota or Motki Mirch.—Long, broad and less pungent, used in green condition for pickling.

Longia or chotki mirch.—Short sized, very pungent, used raw or in green condition for pickling.

UTTAR PRADESH

Desi.—Short to medium (1-1|2 to 3-1|2 inches) light green to dark green, mild to very pungent, consumed mostly fresh.

Gorakhpuri.—Long (3 to 5 inches), tapering, thick skinned red to dark red, glossy, mild to pungent, mostly used for pickling

Ramnagar (Asli Kashipuri).—Medium (2 to 3 inches) yellow glossy, very pungent, curved pointed apex, a good commercial variety.

Lakhimpur.—Medium to long (2-1|2 to 4 inches), broad based, tapering, thick, yellow, glossy, very pungent. Commercial variety.

THE PUNJAB

Nakli Patna.—Long, (2-1|2 to 4 inches), thin, pointed calyx sticking to the capsule, bright red, very pungent, late variety.

Chhota Phal.—Medium, (2 to 3 inches) thick, brittle, red less pungent, early variety.

Lamba Phal.—Long, (5 to 6 inches), less pungent.

Ferozepur chilli.—Medium (2-1|2 inches), thick, light red less pungent.

Mianwal chilli.—Slightly shorter and thinner than Feroze chilli.

ASSAM

Balijuri Amnia or Balijuri Patalparia.—Long (4 to 5 inches), nder, thin skinned, very pungent.

Garo chillies.—Short (2 inches), corrugated, rough skinned, ht red, mild.

ORISSA

Dakhini or I. P. 46-A.—(*i*) Kala (black) medium (2-1|2 to nches), broad, fleshy, blood-red when dried, mildly pungent, avy yielder.

Dhala (white).—(*ii*) Medium (2-1|2 to 3 inches), narrow, less shy, yellowish red when dried, mildly pungent, heavy yielder.

Suryamukhi.—Short (1 to 1-1|2 inches) white or black, avy yielder. Fruits point towards the sun.

Dhanua.—Short (1|3 to 1|2 inch), perenial hilly crop, very ngent.

HYDERABAD

Shivala or Shankeshwar.—Long (4-1|2 to 6 inches), slender, in skinned, bright red and very pungent.

Gati or local.—Long (3-1|2 to 4-1|2 inches), slender, thin inned, dull red, mildly pungent, inferior in quality.

Laungia.—Very small (3|4 to 1-1|2 inches), slender, thin inned, light red and extremely pungent.

Moti Mircha.—Long (3-1|2 to 5 inches), broad, thick skinned, ackish red, mild.

Vilayati Mirch.—Large, very broad, almost square in shape, ery thick skinned, mild, used as a vegetable.

MYSORE

Goribidnur.—Medium (2 to 3 inches), broad, medium, thick, rinkled, fairly seeded, brick red, very pungent, heavy yielder.

Jawari.—Long (4 to 5 inches), roundish, wrinkled, heavily eeded, light yellow, less pungent.

PEPSU

Sanauri.—Medium (2 to 3 inches), thin skinned, smooth or rinkled, yellow, very pungent, average yielder.

Samana.—(*i*) Long (3 to 4 inches), thin skinned, smooth, traight, less seed and moderately pungent.

(*ii*) Short (1 to 2 inches), thick skinned, wrinkled, eavily seed, moderately pungent.

APPENDIX NO. III

Estimated production under green chillies in the main producing areas in India (1945-46 *to* 1949-50)

(In standard maunds)

Year	Madras	Bombay	Madhya Pradesh	Bihar	Uttar Pradesh	Punjab	*Assam	Orissa	West Bengal	Hyderabad	Mysore	*†Madhya Bharat	PEPSU	Ajmer	*†Others	Grand total
1945-46	697,485	2,226,389	766,816	35,000	568,800	12,567	143,140	37,645	395,737	1,472,160	85,404	265,500	6,265§	28,256	19,445	6,760,609
1946-47	802,827	2,456,806	838,580	35,000	557,850	13,150	143,140	21,469	395,737	1,757,040	87,323	265,500	4,920§	38,652	19,445	7,437,439
1947-48	806,703	3,305,077	999,592	40,000	690,300	12,897	143,140	40,834	193,305	2,020,978	89,489	265,500	6,096	10,256	19,445	8,643,612
1948-49	782,639	2,755,760	1,040,087	37,500	638,400	10,526	143,140	32,446	225,330	1,938,222	91,064	265,500	3,592	11,060	19,445	7,994,711
1949-50	728,086	3,782,528	1,087,612	18,000	676,110	20,815	143,140	36,576	228,600	1,966,534	106,890	265,500	5,664	15,264	19,445	9,100,764
Average	763,548	2,905,312	946,537	33,100	626,292	13,991	143,140	33,794	287,742	1,830,987	92,034	265,500	5,307	20,698	19,445	7,987,427

*As yearly statistics are not available, estimated average figures have been given.

†Gwalior only.

Estimated production of dry chillies in the main producing areas in India

(In standard maunds)

Year	Madras	Bombay	Madhya Pradesh	Bihar	Uttar Pradesh	Punjab	*Assam	Orissa	West Bengal	Hyderabad	Mysore	*†Madhya Bharat	PEPSU	Ajmer	*†Others	Grand Total
1945-46	3,487,426	1,813,255	416,880	1,024,515	35,280	251,340	41,470	109,388	18,700	1,472,160	569,361	70,800	125,315§	7,064	19,445	9,462,399
1946-47	4,014,133	2,001,927	455,896	1,109,670	34,601	263,000	41,470	71,432	18,700	1,757,040	582,154	70,800	98,422§	9,663	19,445	10,548,353
1947-48	4,033,517	1,311,676	543,213	998,850	43,512	257,460	41,470	71,252	19,500	2,020,978	596,592	70,800	151,383	8,393	19,445	10,188,041
1948-49	3,913,194	1,127,844	565,444	828,795	39,599	168,170	41,470	57,145	20,300	1,938,222	607,090	70,800	89,643	11,085	19,445	9,498,246
1949-50	3,640,428	1,831,674	591,282	401,263	42,637	332,560	41,470	60,670	18,850	1,966,534	712,601	70,800	140,657	11,416	19,445	9,882,287
Average.	3,817,740	1,617,275	514,543	872,618	39,126	254,506	41,470	73,977	19,210	1,830,987	613,560	70,800	121,084	9,524	19,445	9,915,865

*As yearly statistics are not available, estimated average figures have been given.

†Gwalior only.

‡Others—Includes States like Coorg. Travancore-Cochin, Delhi, etc.

§Patiala only.

APPENDIX NO V

Total annual production of green chillies quantity retained by the producers, and actual supply available for the market and its estimated value in rupees (Average 1945-46 to 1949-50)

(In standard maunds)

Particulars	Madras	Bombay	Madhya Pradesh	Bihar	Uttar Pradesh	Punjab	Assam	Orissa	West Bengal	Hyderabad	Mysore	Madhya Bharat	PEPSU	Ajmer	*Others	Grand Total
Total production.	763,548	2,905,312	946,537	33,100	626,292	13,991	143,140	33,794	287,742	1,830,987	92,034	265,500	5,307	20,698	19,445	7,987,427
Quantity retained.	114,532	29,053	189,307	828	Neg.	490	35,785	16,897	28,774	292,958	920	5,310	106	2,070	2,917	719,947
Supply available.	649,016	2,876,259	757,230	32,272	626,292	13,501	107,355	16,897	258,968	1,538,029	91,114	260,190	5,201	18,628	16,528	7,267,480
Wastage	32,451	28,763	56,792	Neg.	6,263	540	1,610	845	3,885	153,803	2,278	19,514	Neg.	186	826	307,756
Actual supply available for the market.	616,565	2,847,496	700,438	32,272	620,029	12,961	105,745	16,052	255,083	1,384,226	88,836	240,676	5,201	18,442	15,702	6,959,724
Value in thousand rupees.	10,944	48,941	11,645	367	9,804	172	3,410	295	8,226	34,865	2,238	4,001	59	166	236	135,369

Neg. = Negligible.

*Others—Andaman & Nicobar Islands, Himachal Pradesh, Coorg, Tripura, Manipur, Cochin, Delhi, etc.

Total annual production of dry chillies, quantity retained by the producers and actual supply available for the market and its estimated value in rupees (*Average*, 1945-46 *to* 1949-50)

(In standard maunds)

Particulars	Madras	Bombay	Madhya Pradesh	Bihar	Uttar Pradesh	Punjab	Assam	Orissa	West Bengal	Hyderabad	Mysore	Madhya Bharat	PEPSU	Ajmer	*Others	Grand Total
Total, production.	3,817,740	1,617,275	514,543	872,618	39,126	254,506	41,470	73,977	19,210	1,830,987	613,560	70,800	121,084	9,524	19,445	9,915,865
Quantity retained.	572,661	101,080	102,909	21,815	783	17,815	4,562	18,494	2,882	292,958	30,678	14,160	2,422	1,905	2,917	1,188,041
Supply available.	3,245,079	1,516,195	411,634	850,803	38,343	236,691	36,908	55,483	16,328	1,538,029	582,882	56,640	118,662	7,619	16,528	8,727,824
Wastage ..	97,352	15,162	20,582	12,762	96	5,917	923	1,387	408	138,423	29,144	2,832	2,967	381	413	328,749
Actual supply available for the market.	3,147,727	1,501,033	391,052	838,041	38,247	230,774	35,985	54,096	15,920	1,399,606	553,738	53,808	115,695	7,238	16,115	8,399,075
Value (in thousand rupees).	174,502	83,401	24,783	49,602	2,457	12,866	2,715	3,540	1,201	68,581	30,629	341	6,530	326	967	462,441

*Others—Includes States like Coorg, Travancore-Cochin, Delhi, etc.

APPEND

Exports of dry chil

(In stand

Destinations	1942-43	1943-44	1944-45	1945-46	1946-47	Average
United Kingdom (including channel Islands).	2,308	570	163	411	..	691
Aden and Dependencies.	3,748	3,451	1,714	347	89	1,870
Bahrein Islands.	244	23	14	362	148	158
Ceylon (excluding Maldives).	257,524	145,945	160,550	163,518	226,014	190,710
Union of South Africa.	218	23	38	211	42	107
Zanzibar and Pemba.	161	193	52	109	12	105
Mauritius and Dependencies.	2,024	3,192	1,165	908	1,575	1,773
Commonwealth of Australia.	3,614	468	143	310	197	946
Others ..	4,140	1,199	585	5,940	30,128	8,398
Total quantity.	273,981	155,064	164,424	172,116	258,205	204,758
(Total value in Rupees).	4,856,632	4,944,527	4,647,036	5,928,352	12,963,605	6,668,030
Shares of : (*in maunds.*)—						
Bengal..	16,376	69,346	80,884	82,742	132,179	76,306
Bombay	17,388	9,703	5,506	27,976	25,122	17,139
Sind ..	1,730	32,279	22,092	3,784	4,297	12,836
Madras	238,487	43,736	55,942	57,614	96,607	98,477

N.A.=Not available.
*=Figures previous to 1948-49 relate to undivided India.

II

India (1942-43 *to* 1950-51)

s)

8	1948-49*	1949-50*	1950-51*	Average for the years 1948-49 to to 1950-51	Per-cent-age
	N.A.	N.A.	N.A.	N.A.	..
	N.A.	N.A.	N.A.	N.A.	..
	N.A.	N.A.	N.A.	N.A.	..
35	112,403	172,156	81,761	122,107	82.1
	N.A.	N.A.	N.A.	N.A.	..
	N.A.	N.A.	N.A.	N.A.	..
.	N.A.	N.A.	N.A.	N.A.	..
	N.A.	N.A.	N.A.	N.A.	..
,230	24,016	54,443	1,451	26,636	17.9
,165	136,419	226,599	83,212	148,743	100·0
,041	8,953,058	18,533,223	8,005,079	11,830,453	..
,462	N.A.	N.A.	N.A.	..	..
	..	..	..	..	.
177	N.A.	N.A.	N.A.	..	..
,586	N.A.	N.A.	N.A.	..	..

APPENDIX NO. VIII

Monthwise exports of dry chillies from India (1942-43 *to* 1950-51)

(In standard maunds)

Month	1942-43	1943-44	1944-45	1945-46	1946-47	Average	Per-centage	1947-48	1948-49*	1949-50*	1950-51*	Average for the years 1948-49 to 1950-51	Percentage.
April ..	12,669	5,498	15,377	10,751	45.907	18,041	8.8	17,885	16,376	29,817	3,151	16,448	11.1
May ..	41,559	18,787	15,831	4,358	36,456	23,398	11.4	21,646	3,110	25,903	1,412	10,142	6.8
June ..	79,380	15,881	28,228	26,972	57,872	41,667	20.4	20,327	2,134	16,747	679	6,520	4.4
July ..	28,167	22,270	12,632	20,972	13,795	19,567	9.6	43,093	2,199	13,335	2,691	6,075	4.1
August ..	10,988	16,412	12,012	12,104	6,126	11,528	5.6	9,952	3,565	21,851	41	8,485	5.7
September	12,636	14,997	2,770	2,523	10,456	8,676	4.2	17,758	957	9,902	1,416	4,092	2.7
October ..	40,910	4,959	26,299	10,021	2,675	16,973	8.3	13,730	2,875	9,789	14,233	8,966	6.0
November..	22,931	4,470	11,593	17,713	7,342	12,810	6.3	15,506	9,156	36,340	9,043	18,180	12.2
December	3,102	6,228	8,281	16,272	22,413	11,259	5.5	10,922	13,689	15,718	15,977	15,128	10.2
January ..	6,294	15,206	5,963	16,034	18,114	12,322	6.0	17,871	15,378	19,715	35	11,709	7.9
February	4,724	7,855	19,004	4,952	20,894	11,486	5.6	30,068	39,958	10,908	1,993	17,619	11.8
March ..	10,621	22,501	6,434	29,444	16,155	17,031	8.3	24,407	27,022	16,574	32,541	25,379	17.1
Total ..	273,981	155,064	164,424	172,116	258,205	204,758	100.0	243,165	136,419	226,599	83,212	148,743	100.0

Average monthly farm prices of dry chillies at Mallanguraroo village near Virudhunagar market in the Madras State (1941-50)

(In rupees and annas per standard maund)

Months :	Years									
	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950
	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.
January ..	11 14	10 15	28 1	28 9	N.A.	42 8	62 0	43 10	86 10	91 0
February ..	11 14	12 9	45 11	N.A.	N.A.	54 9	66 0	42 0	92 0	91 8
March ..	11 4	15 1	44 12	N.A.	28 4	52 10	69 8	47 10	65 4	73 0
April ..	9 6	21 1	35 14	20 0	26 15	52 15	55 8	49 8	66 4	86 4
May ..	8 12	16 3	35 14	19 1	28 4	53 5	57 6	49 8	68 10	84 10
June ..	11 9	21 14	34 14	18 11	28 5	56 7	63 10	54 0	68 10	100 12
July ..	12 10	22 8	31 11	N.A.	29 8	54 4	62 10	64 0	70 0	106 0
August ..	15 11	22 14	25 6	12 1	28 14	51 11	60 6	67 0	92 10	113 12
September ..	10 10	19 1	33 0	16 3	30 2	49 8	48 0	68 0	64 10	96 0
October ..	8 7	19 11	30 7	16 3	31 2	47 9	54 0	62 0	86 4	106 0
November ..	9 11	21 4	28 9	N.A.	N.A.	54 14	53 0	72 10	93 0	85 0
December ..	10 5	27 5	28 4	17 12	42 3	64 6	48 0	96 4	91 0	83 0
Average ..	11 0	18 7	33 9	18 9	30 6	52 14	58 5	59 11	78 12	93 1

N. A.=Not available.

APPENDIX NO. X

Average monthly harvest prices of green chillies at Palakanathur village in Madurai district, Madras State (1941-50)

(In rupees and annas per standard maund)

Years	Months				Seasonal average	
	April		May		June		July			
	Rs.	a.	Rs.	a.	Rs.	a.	Rs.	a.	Rs.	a.
1941 ..	4	15	4	8	4	12	5	12	5	0
1942 ..	5	0	4	12	4	8	6	3	5	2
1943 ..	5	2	6	7	6	11	8	10	6	12
1944 ..	7	10	7	12	11	7	14	5	10	5
1945 ..	14	0	14	5	16	3	19	7	16	0
1946 ..	9	8	11	7	13	5	17	2	12	14
1947 ..	12	0	10	0	13	0	15	0	12	8
1948 ..	15	0	18	0	12	0	10	0	13	12
1949 ..	16	0	20	0	25	0	22	0	20	12
1950 ..	15	0	22	0	28	0	33	0	24	4

Average monthly harvest prices of dry chillies at Byadgi and Sankeshwar, [illegible]

(In rupees and annas per standard maund)

Year	Centre of production							
	Byadgi				Sankeshwar			
	Months							
	October	November	December	Seasonal average	October	November	December	Seasonal average
	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.
1941	6 6	6 0	7 8	6 10	10 2	10 2	11 15	10 12
1942	6 14	7 8	10 7	8 4	10 10	11 15	13 6	12 0
1943	20 6	19 14	24 13	21 11	33 1	27 9	34 14	31 13
1944	22 3	20 1	17 7	19 14	33 1	29 6	29 6	30 10
1945	24 8	21 11	20 14	22 6	29 6	32 2	37 10	33 1
1946	38 6	42 7	44 1	41 10	49 12	47 15	49 1	48 15
1947	65 15	54 6	57 14	59 6	58 12	65 10	68 8	64 5
1948	34 0	45 0	48 0	42 5	52 11	50 14	50 14	51 8
1949	45 0	45 0	38 5	42 12	..	58 6	61 13	60 2
1950	57 0	41 10	37 0	45 3	70 14	63 10	52 11	62 6

APPENDIX NO. XII

Average monthly harvest prices of dry chillies at Pusa Road and Dalsingsarai in Bihar, (1942-43 *to* 1949-50).

(In rupees annas per standard maund)

Centre of production	Months	Years							
		1942-43	1943-44	1944-45	1945-46	1946-47	1947-48	1948-49	1949-50
		Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.
Pusa Road	December	13 0	N.A.	N.A.	31 0	N.A.	30 0	45 0	89 0
	January	14 8	18 0	13 0	35 0	37 0	38 0	38 0	68 0
	February	15 12	20 4	12 0	34 8	38 8	38 0	38 0	70 0
	March	22 0	17 8	17 0	36 12	40 0	36 0	40 0	82 0
	Seasonal average ..	19 5	18 9	14 0	34 5	38 8	35 8	40 4	77 4
Dalsingsarai	December	N.A.	19 0	N.A.	29 0	39 0	29 0	43 0	55 0
	January	13 8	15 8	13 8	36 0	41 0	37 8	40 0	60 0
	February	14 8	16 0	15 0	35 0	45 0	36 0	42 0	93 0
	March	21 0	17 0	16 8	37 0	30 0	34 0	50 0	95 0
	Seasonal average ..	16 5	16 14	15 0	34 4	38 12	34 2	43 12	75 12

N.A. – Not available.

Average monthly harvest prices of green chillies at Pusa Road and Dalsingsarai in Bihar, (1942-43 to 1949-50).

(In rupees and annas per standard maund)

Centre of production	Months	Years							
		1942-43	1943-44	1944-45	1945-46	1946-47	1947-48	1948-49	1949-50
		Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.
Pusa Road ..	December	2 12	3 4	2 8	7 0	8 0	7 8	11 0	22 0
	January	3 0	4 0	2 12	7 12	8 8	9 0	9 0	17 0
	February	3 4	4 12	2 8	7 8	9 0	9 8	9 8	19 8
	March	5 0	3 12	3 8	8 4	9 8	12 0	11 8	26 0
	Seasonal average ..	3 8	3 15	2 13	7 10	8 12	9 8	10 4	21 2
Dalsingsarai ..	December ..	N.A.	4 4	3 0	6 0	8 12	7 0	10 8	13 8
	January	3 0	3 4	3 0	8 0	9 0	9 0	10 0	15 0
	February	3 4	3 12	3 8	7 8	9 8	11 0	11 0	24 0
	March	4 12	4 0	4 0	8 8	6 12	12 0	13 8	26 8
	Seasonal average ..	3 11	3 13	3 6	7 8	8 8	9 12	11 4	19 12

N. A.=Not available.

APPENDIX NO. XIV

Average monthly wholesale prices of different varieties of dry chillies at the Kanpur market, (1942-50).

(In rupees and annas per standard maund)

Variety	Year	Months												Average
		Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
		Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.
Patna	1942	26 0	24 0	24 0	23 0	23 0	26 0	26 0	28 0	28 0	29 0	28 0	26 0	25 15
	1943	34 0	32 0	32 0	30 0	30 0	32 0	32 0	34 0	35 0	35 0	34 0	32 0	32 11
	1944	44 0	42 0	40 0	40 0	42 0	42 0	45 0	45 0	44 0	45 0	42 0	40 0	42 9
	1945	48 0	50 0	48 0	45 0	45 0	48 0	48 0	50 0	52 0	52 0	52 0	52 0	49 3
	Average	38 0	37 0	36 0	34 8	35 0	37 0	37 12	39 4	39 12	40 4	39 0	37 8	37 9
	1946	48 0	48 0	48 0	50 0	50 0	54 0	50 0	52 0	51 0	53 0	50 0	48 0	50 3
	1947	43 0	40 0	40 0	45 0	45 0	50 0	48 0	50 0	55 0	52 0	55 0	50 0	47 12
	1948	55 0	50 0	52 0	55 0	52 0	55 0	58 0	60 0	60 0	65 0	65 0	60 0	57 4
	1949	75 0	75 0	70 0	72 0	70 0	72 0	75 0	78 0	80 0	85 0	82 0	80 0	76 3
	1950	87 0	85 0	78 0	75 0	78 0	80 0	85 0	88 0	90 0	95 0	100 0	90 0	85 15
	Average	61 10	59 10	57 10	59 6	59 0	62 3	63 3	65 10	67 3	70 0	70 6	65 10	63 7

1943	40	0	40	0	41	0	42	0	42	0	42	0	43	0	43	0	42	0	40	0	40	0	40	0	41	4
1944	44	0	45	0	45	0	46	0	46	0	48	0	47	0	47	0	44	0	40	0	40	0	40	0	44	5
1945	55	0	56	0	58	0	58	0	57	0	58	0	60	0	60	0	58	0	50	0	50	0	48	0	55	11
Average	42	4	42	12	53	12	44	0	44	0	44	8	44	12	44	12	42	8	38	8	38	8	38	8	42	6
1946	58	0	56	0	56	0	58	0	60	0	60	0	58	0	60	0	65	0	55	0	50	0	52	0	57	5
1947	N.A.		N.A.		N.A.		N.A.		N.A.		NA.		N.A.		N.A.		N.A.		N.A.		N.A.		N.A.		N.A.	
1948	50	0	45	0	48	0	55	0	50	0	52	0	55	0	55	0	60	0	60	0	60	0	55	0	53	12
1949	72	0	72	0	70	0	70	0	68	0	70	0	72	0	75	0	78	0	75	0	75	0	75	0	72	11
1950	85	0	78	0	75	0	72	0	75	0	78	0	80	0	85	0	88	0	90	0	95	0	90	0	82	9
Average	66	4	62	12	62	4	63	12	63	4	65	0	66	4	68	12	72	12	70	0	70	0	68	0	66	9

N. A.=Not available.

APPENDIX NO. XV

Average monthly wholesale prices of different vareties of dry chillies at the Lucknow market (1942-50).

(In rupees and annas per standard maund)

Variety	Year	Months												Average
		Jan.	Feb.	March	April	May	June	July	August	Sept.	Oct.	Nov.	Dec.	
		Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.
Kashipur (U.P.) ..	1942	50 0	49 0	50 0	50 0	50 0	51 0	51 0	48 0	43 0	40 0	35 0	40 0	46 7
	1943	49 0	50 0	53 0	50 0	52 0	53 0	54 0	53 0	48 0	45 0	43 0	45 0	49 9
	1944	56 0	56 0	57 0	58 0	58 0	60 0	62 0	62 0	55 0	54 0	50 0	52 0	56 11
	1945	60 0	58 0	58 0	60 0	60 0	62 0	60 0	58 0	59 0	59 0	55 0	52 0	58 7
	Average	53 12	53 4	54 8	54 8	55 0	56 8	56 12	55 4	51 4	49 8	45 12	47 4	52 12
	1946	60 0	62 0	64 0	62 0	64 0	66 0	60 0	58 0	58 0	56 0	55 0	54 0	59 15
	1947	50 0	50 0	49 0	48 0	46 0	43 0	46 0	46 0	48 0	46 0	44 0	50 0	47 3
	1948	59 0	60 0	60 0	54 0	58 0	58 0	56 0	56 0	54 0	59 0	55 0	67 0	58 0
	1949	73 0	73 0	72 0	75 0	75 0	78 0	78 0	78 0	75 0	70 0	70 0	70 0	73 15
	1950	80 0	85 0	86 0	88 0	90 0	90 0	88 0	88 0	80 0	78 0	70 0	75 0	83 3
	Average	64 6	66 0	66 3	65 6	66 10	67 0	65 10	65 3	63 0	61 13	58 13	63 3	64 7
Patna	1942	28 0	24 0	25 0	25 0	25 0	27 0	28 0	28 0	27 0	28 0	28 0	29 0	26 13
	1943	35 0	34 0	33 0	30 0	30 0	32 0	35 0	36 0	36 0	36 0	35 0	35 0	33 15
	1944	45 0	43 0	40 0	40 0	43 0	43 0	47 0	47 0	47 0	44 0	40 0	44 0	43 9
	1945	48 0	45 0	45 0	46 0	50 0	50 0	48 0	49 0	52 0	52 0	52 0	50 0	48 15
	Average	39 0	36 8	35 12	35 4	37 0	38 0	39 8	40 0	40 8	40 0	38 12	39 8	38 5
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

APPENDIX NO. XVI

Average monthly wholesale prices af different varieties of dry chillies at the Raichur market in the Hyderabad State, (1946-50).

(In rupees and annas per standard maund)

Vareity	Year	Months												Average
		Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
		Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.
Warangal	1946	34 9	42 4	43 7	45 11	57 3	60 0	62 13	65 12	61 7	60 9	60 4	52 14	53 14
	1947	38 9	48 10	60 0	54 4	50 0	50 0	48 10	44 5	41 12	51 7	54 4	57 11	49 15
	1948	51 7	46 5	31 2	32 11	25 11	22 14	34 5	34 5	25 11	27 11	30 4	31 3	32 3
	1949	22 13	26 2	34 15	32 2	32 2	39 3	49 14	45 11	49 14	49 14	45 7	46 6	39 9
	1950	45 7	47 8	60 0	62 4	61 2	64 12	76 5	79 6	87 12	65 2	52 6	N.A.	63 13
	Average	38 9	42 3	45 14	44 0	45 4	47 6	54 6	53 14	53 5	50 15	48 8	47 1	47 10
Dharmabad ..	1946	34 5	42 4	45 11	50 0	68 9	62 13	65 12	68 9	61 7	60 9	60 0	52 0	56 0
	1947	38 9	48 11	60 0	53 2	50 9	50 0	48 10	44 0	41 7	51 7	51 11	58 0	49 11
	1948	51 7	47 12	31 7	28 9	27 7	26 9	35 12	35 12	22 14	27 14	31 1	31 7	33 3
	1949	27 7	31 6	32 0	41 10	43 7	44 10	49 10	45 11	49 4	49 7	48 2	49 15	42 11
	1950	48 7	50 14	62 13	65 11	74 4	73 15	89 12	98 2	97 0	70 0	51 13	N.A.	71 2
	Average	40 1	44 3	46 6	47 13	52 14	51 9	57 14	58 7	54 6	51 14	48 9	47 14	50 3
Jawari	1946	34 9	42 9	43 11	51 7	60 0	62 5	65 12	68 9	62 13	60 0	60 0	51 11	55 5
	1947	34 0	44 2	57 3	53 2	50 9	48 10	48 0	44 5	41 7	48 10	52 14	57 3	48 5
	1948	52 14	45 5	30 14	25 11	25 11	28 9	34 5	34 5	24 4	27 3	30 0	30 0	32 7
	1949	26 7	31 0	32 2	37 2	41 7	42 14	46 6	45 15	47 3	45 11	45 2	47 9	40 12
	1950	46 0	48 11	61 6	62 13	71 7	70 15	80 0	85 11	94 5	65 11	50 9	67 5	67 1
	Average	38 12	42 5	45 1	46 1	49 13	50 11	54 14	85 12	54 0	49 7	47 11	50 12	48 12

N. A.=Not available.

Average monthly wholesale prices of green chillies at Bombay in the Bombay State, (1944-50).

(In rupees and annas per standard maund)

Year	Months												
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept	Oct.	Nov.	Dec.	Average
	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.
1944	15 13	24 1	16 6	9 3	13 7	14 14	10 5	13 15	14 5	15 7	10 13	13 7	14 5
1945	16 11	21 11	19 13	22 1	16 11	23 8	22 7	11 3	12 14	11 3	10 2	10 10	16 9
1946	15 10	33 1	23 8	16 3	24 13	29 6	37 8	24 13	16 14	20 9	11 12	8 1	21 14
1947	12 8	21 14	21 8	16 6	15 10	18 15	20 15	14 11	13 15	16 3	14 2	14 8	16 12
1950	15 10	21 9	14 11	18 0	12 11	12 2	15 12	17 1	17 4	17 14	17 10	18 6	16 9
Average	15 4	24 7	19 3	16 6	16 10	19 12	21 6	16 5	15 1	16 4	12 14	13 0	17 3

N.B.—Price statistics for the years 1948 and 1949 are not available.

APPENDIX NO. XVIII

Average monthly wholesale prices of green chillies at the Nagpur market in Madhya Pradesh, (1946-50).

(In rupees and annas per standard maund)

Year	Months												
	Jan.	Feb.	March	April	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Average
	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.
1946	8 0	8 11	12 4	15 12	23 3	39 0	12 0	11 2	9 8	7 15	7 0	7 10	13 8
1947	8 7	9 7	10 8	19 12	32 8	38 0	15 11	10 0	7 0	8 0	7 0	8 8	14 9
1948	7 4	8 0	13 0	40 0	40 0	27 0	20 0	13 4	10 0	8 0	8 0	10 0	17 1
1949	10 0	14 0	20 0	40 0	50 0	21 4	14 8	13 5	13 5	13 5	13 5	13 5	19 11
1950	16 0	16 0	20 0	27 0	40 0	27 8	15 0	16 0	10 0	8 0	10 0	13 5	18 4
Average	9 15	11 4	15 2	28 8	37 2	30 9	15 7	12 12	9 15	9 1	9 1	10 9	16 10

Average monthly wholesale prices of green chillies of desi (Indigenous) variety of chillies at Lucknow in Uttar Pradesh (1942-50).

(In rupees and annas per standard maund)

Name of market	Year	Months												Average
		Jan.	Feb.	March	April	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
		Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.
Lucknow ..	1942	8 0	8 0	9 0	9 0	11 0	14 0	12 0	10 0	10 0	9 0	8 0	6 0	9 8
	1943	10 0	9 0	11 0	14 0	18 0	26 0	20 0	18 0	16 0	16 0	14 0	12 0	15 5
	1944	12 0	12 0	15 0	22 0	25 0	30 0	28 0	30 0	25 0	25 0	20 0	16 0	21 11
	1945	12 0	15 0	20 0	20 0	30 0	32 0	30 0	30 0	25 0	22 0	20 0	18 0	22 13
	Average	10 8	11 0	13 12	16 4	21 0	25 8	22 8	22 0	19 0	18 0	15 8	13 0	17 5
	1946	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
	1947	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
	1948	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
	1949	9 0	12 0	15 0	20 0	23 0	30 0	25 0	20 0	18 0	15 0	12 0	8 0	17 4
	1950	14 0	18 0	24 0	28 0	40 0	43 0	32 0	26 0	23 0	20 0	16 0	12 0	24 11
	Averege	11 8	15 0	19 8	24 0	31 8	36 8	28 8	23 0	20 8	17 8	14 0	10 0	20 15

N. A.=Not available.

APPENDIX NO. XX

Average manthly wholesale prices of green chillies at Calcutta, (1946-50).

(In rupees and annas per standard maund)

Year	MONTHS												Average
	Jan.	Feb.	March	April	May	June	July	Aug.	Sep.	Oct.	Nov	Dec	
	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.
1946	21 0	24 0	24 0	24 0	24 0	24 0	24 0	26 8	32 8	32 8	32 8	38 8	27 5
1947	33 8	27 8	27 8	32 8	32 8	32 8	32 8	32 8	32 8	32 8	32 8	35 0	31 15
1948	25 0	30 0	30 0	35 0	35 0	30 0	35 0	40 0	40 0	40 0	45 0	30 0	34 9
1949	20 0	30 0	33 0	30 0	35 0	25 0	35 0	40 0	45 0	50 0	50 0	30 0	35 4
1950	25 0	40 0	50 0	25 0	30 0	20 0	25 0	35 0	50 0	40 0	25 0	20 0	32 1
Average	25 14	30 5	32 14	29 5	31 5	26 5	30 5	34 13	40 0	39 0	37 0	30 11	32 4

Average monthly wholesale prices of dry chillies at a few important markets in the Madras State, (1941-50).

(In rupees and annas per standard maund)

Name of the market	Year	MONTHS												Average
		Jan-	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
		Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.
Kakinada ..	1941 ..	11 3	11 8	9 14	9 14	10 11	11 13	11 8	12 6	13 11	13 11	13 8	13 3	11 15
	1942 ..	12 5	12 5	10 11	10 11	10 11	16 6	20 10	20 10	20 10	23 14	23 14	31 5	17 13
	1943 ..	28 0	28 13	41 2	32 14	41 2	39 8	41 2	39 8	39 8	42 13	46 14	42 13	38 11
	1944 ..	42 13	32 14	36 3	36 3	32 14	36 3	32 14	32 14	32 14	29 10	32 14	31 5	34 2
	1945 ..	32 14	29 10	29 10	34 10	37 14	39 8	41 2	41 3	49 6	48 9	47 11	46 2	39 14
	Average	25 7	23 0	25 8	24 14	26 10	28 11	29 7	29 5	31 3	31 11	32 15	32 15	28 8
	1946 ..	52 10	44 6	46 2	72 6	70 0	64 3	61 13	56 0	54 5	53 8	52 11	59 5	57 4
	1947 ..	65 13	49 5	55 15	51 0	59 4	49 1	48 9	43 6	47 11	42 13	41 2	36 3	49 3
	1948 ..	27 2	32 3	30 7	32 2	29 10	32 15	44 7	46 1	49 6	52 11	54 5	54 5	40 8
	1949 ..	58 7	51 0	47 12	51 14	65 14	72 8	72 8	89 11	91 6	89 11	101 12	91 6	73 10
	1950 ..	93 13	95 14	87 4	102 1	111 15	102 1	115 3	107 0	103 11	102 14	91 6	86 7	99 15
	Average ..	59 9	54 9	53 8	61 14	67 5	64 2	68 8	68 7	69 5	68 5	68 4	65 8	64 2

APPENDIX NO. XXI—(*Contd.*)

Name of the market	Year	MONTHS												Average
		Jan.	Feb.	March	April	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
		Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.
Guntur ..	1941 ..	9 2	8 3	9 2	9 2	9 2	9 2	10 11	10 11	10 11	9 14	9 14	10 5	9 11
	1942 ..	9 14	10 5	9 14	10 11	12 6	16 6	18 2	19 0	21 6	23 14	24 10	31 5	17 5
	1943 ..	29 10	28 0	37 14	37 0	37 0	37 14	34 10	32 14	32 2	32 14	32 14	31 3	33 11
	1944 ..	30 6	32 14	32 14	34 10	34 10	33 11	33 11	32 14	32 2	30 8	32 14	32 14	32 13
	1945 ..	32 14	32 14	32 14	29 10	31 5	32 2	36 3	41 3	41 2	46 2	57 10	52 11	38 14
	Average ..	22 6	22 7	24 8	24 3	24 14	25 13	26 11	27 5	27 8	28 10	31 9	31 11	26 7
	1946 ..	50 5	49 6	52 11	57 10	57 10	57 10	58 5	58 8	58 8	58 8	58 8	59 5	56 6
	1947 ..	64 3	67 8	67 8	67 8	60 14	59 10	55 15	52 11	40 1	39 8	39 8	39 8	54 9
	1948 ..	37 1	36 3	34 9	32 15	38 12	34 9	36 3	39 8	41 2	42 13	46 1	57 10	39 13
	1949 ..	60 14	69 2	60 14	59 4	64 3	62 9	65 14	86 7	89 1	83 6	102 1	85 14	74 2
	1950 ..	83 15	89 1	87 4	90 7	97 2	100 6	105 6	96 5	105 6	101 4	92 11	77 6	93 14
	Average ..	59 4	62 4	60 9	61 9	63 11	62 15	64 5	66 10	66 13	65 1	67 12	63 15	63 12
Tirunelveli ..	1941 ..	9 14	9 14	9 14	9 14	9 14	9 14	9 14	12 13	12 13	10 6	10 8	9 14	10 7
	1942 ..	9 14	9 14	9 14	9 14	9 14	17 0	17 0	21 5	21 5	18 6	21 5	21 2	15 9
	1943 ..	28 6	26 14	28 6	39 13	38 14	35 6	42 10	39 13	18 6	24 2	21 5	21 3	30 7
	1944 ..	22 11	22 11	22 11	22 11	22 11	19 0	14 3	22 11	22 11	21 5	19 14	19 14	21 1
	1945 ..	[illegible]												

	1946	..	34	0	42	10	54	0	58	14	57	8	60	5	64	8	63	3	51	10	46	0	53	2	54	10	55	0							
	1947	..	63	3	60	5	64	8	63	3	63	3	64	8	63	14	63	3	63	3	45	15	49	12	54	9	59	15							
	1948	..	49	10	44	4	42	9	44	4	48	2	..		57	7	63	3	65	0	74	10	73	12	73	12	57	14							
	1949	..	76	10	87	2	84	4	68	15	61	12	68	7	58	15	71	6	73	14	68	10	76	11	86	9	74	7							
	1950	..	90	13	90	13	85	11	78	0	80	0	89	6	106	5	106	6	104	4	102	2	87	2	80	9	91	13							
	Average	..	62	14	65	0	66	3	62	10	62	2	70	11	72	3	73	7	71	9	67	7	68	1	70	0	67	11							
Tuticorin	..	1941	..	11	10	11	11	11	11	11	0	9	10	16	0	15	6	16	2	16	0	12	6	11	0	10	5	12	12							
	1942	..	10	5	12	5	13	11	12	8	20	5	24	10	22	10	23	11	25	0	20	0	24	0	29	0	19	13							
	1943	..	32	0	31	14	43	10	38	5	40	0	42	8	37	0	21	10	21	2	22	2	23	14	23	8	31	7							
	1944	..	23	2	23	2	23	10	20	0	17	0	14	0	16	0	23	5	23	0	23	0	20	5	23	3	20	13							
	1945	..	27	11	29	5	29	5	33	3	31	13	29	13	32	8	31	5	24	2	28	4	30	13	33	3	30	2							
	Average	..	20	15	21	11	24	6	23	0	23	12	25	6	24	11	23	3	21	14	21	2	22	0	23	13	23	0							
	1946	..	34	2	44	8	57	8	59	2	56	11	58	5	61	6	55	11	50	0	50	13	49	2	55	0	52	11							
	1947	..	34	2	44	8	57	8	59	2	56	11	58	5	61	7	55	12	50	0	50	13	49	0	55	0	52	11							
	1948	..	47	1	42	4	42	8	42	8	49	2	54	2	56	2	59	2	59	15	65	2	66	9	68	5	54	6							
	1949	..	90	6	89	15	70	6	62	9	65	11	65	13	65	5	86	2	71	9	76	1	93	11	87	6	77	1							
	1950	..	88	14	89	8	82	7	79	6	87	0	90	12	110	12	108	4	105	8	96	3	83	11	86	3	92	6							
	Average	..	58	15	62	2	62	1	60	9	63	1	65	7	71	0	73	0	67	6	67	13	68	7	70	6	65	14							

APPENDIX No. XXII.

Average monthly wholesale prices of dry chillies in some of the important markets in the Bombay State, (1941-50).

(In rupees and annas per standard maund)

Name of the market	Year	MONTHS												Average
		Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
		Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.
Byadgi ..	1941 ..	7 0	9 5	6 14	6 3	7 3	6 14	6 11	9 13	7 13	6 14	7 8	10 7	7 11
	1942 ..	7 13	7 11	8 0	9 0	11 2	11 15	11 7	12 12	15 8	20 7	19 15	24 13	13 6
	1943 ..	22 3	26 5	25 15	31 6	34 2	35 9	28 7	24 8	23 6	21 14	20 1	17 8	25 15
	1944 ..	18 5	25 2	26 15	24 8	21 1	27 7	24 8	23 9	24 13	24 8	21 11	20 14	23 10
	1945 ..	25 6	28 2	29 3	29 12	31 1	32 11	34 0	35 10	36 6	38 6	42 7	44 1	33 15
	Average ..	16 2	19 5	19 6	20 3	20 15	22 14	21 0	21 4	21 9	22 7	22 5	23 9	20 15
	1946 ..	52 0	53 10	56 0	63 0	63 0	66 8	66 2	73 7	77 2	65 15	54 6	57 14	62 7
	1947 ..	64 5	62 13	60 13	57 14	54 3	56 15	51 7	39 5	40 7	42 4	55 10	59 8	53 13
	1948 ..	N.A.	N.A.	N.A.	N.A.	N.A.	63 6	40 0	38 5	32 0	45 0	45 0	38 5	43 2
	1949 ..	43 5	45 0	46 11	48 5	55 0	66 10	72 0	72 0	72 0	57 0	41 11	37 0	54 12
	1950 ..	45 0	48 5	50 0	60 0	66 0	67 0	77 0	82 0	100 0	85 0	60 0	70 0	67 8
	Average ..	51 3	52 7	53 6	57 5	59 9	64 1	61 5	61 0	64 5	59 1	51 5	52 9	57 5
Bijapur ..	1941 ..	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

		1944	..	23	14	22	1	21	2	22	1	18	6	16	9	14	11	12	14	12	12	22									
		1945	..	29	3	25	0	25	0	22	15	20	14	29	3	29	3	26	1	22	15	22	15	29	0	32	2	26	3
		Average	..	27	13	25	13	27	5	30	0	26	14	28	7	27	7	23	11	21	7	23	9	27	7	26	0	26	5
		1946	..	39	2	49	5	54	15	67	8	67	8	80	8	65	5	61	11	64	2	52	8	47	14	57	1	58	15
		1947	..	55	12	64	0	50	2	45	8	43	0	43	0	41	13	40	5	32	10	37	13	43	0	45	0	45	3
		1948	..	44	1	44	1	44	1	44	1	44	1	49	10	46	5	44	1	47	14	47	14	52	9	53	4	46	13
		1949	..	55	8	47	12	46	5	47	0	52	9	51	7	57	5	59	14	58	13	59	8	60	10	58	0	54	9
		1950	..	58	7	58	0	63	3	73	13	76	0	75	11	80	0	64	0	78	0	58	0	53	4	78	4	68	1
		Average	..	50	9	52	10	51	12	55	9	56	10	60	1	58	2	54	0	56	5	51	2	51	7	58	5	54	11
Jalgaon	..	1941	..	25	8	16	0	20	0	28	0	26	0	24	0	20	0	19	0	18	0	16	0	16	0	17	0	20	7
		1942	..	32	0	30	0	34	0	35	0	35	0	32	0	32	0	30	0	29	0	29	0	29	0	29	0	31	5
		1943	..	30	0	30	0	31	8	38	0	34	0	34	0	35	0	34	0	30	0	20	0	24	0	24	0	30	6
		1944	..	23	8	23	0	21	8	26	12	25	4	28	0	28	0	26	8	24	8	23	0	29	12	25	8	25	7
		1945	..	37	0	37	4	39	0	40	4	38	0	39	8	37	0	34	8	40	8	33	12	38	12	40	12	38	0
		Average	..	29	10	27	4	29	3	33	10	31	10	31	8	30	6	28	13	28	6	24	6	27	8	27	4	29	2
		1946	..	50	12	52	0	54	12	54	8	52	12	56	0	54	8	54	0	49	8	53	0	52	4	54	4	53	3
		1947	..	51	8	53	4	45	12	42	12	42	0	42	12	42	0	38	12	36	0	35	0	39	0	46	12	42	15
		1948	..	44	0	42	0	42	0	44	0	42	0	47	0	48	0	47	0	46	0	45	0	35	0	37	0	43	4

APPENDIX No. XXII (*Contd.*)

Name of the market	Year	MONTHS												Average
		Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
		Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs.a.
	1949 ..	50 0	48 0	54 0	66 0	54 0	N.A.	N.A.	N.A.	N.A.	48 0	47 0	60 0	53 6
	1950 ..	62 0	62 0	62 0	68 0	62 0	67 0	63 0	72 0	68 0	71 0	68 0	63 0	65 11
	Average ..	51 10	51 7	51 11	55 1	50 9	53 3	51 14	52 15	49 14	50 6	48 4	52 3	51 9
Sholapur ..	1941 ..	8 6	7 15	7 2	N.A.	N.A.	7 9	N.A.	N.A.	N.A.	N.A.	N.A.	12 15	8 13
	1942 ..	12 2	12 9	13 6	14 3	18 13	18 6	13 6	18 6	N.A.	18 6	N.A.	12 15	15 4
	1943 ..	35 14	36 11	40 12	44 13	44 10	42 11	40 11	38 13	35 7	35 4	35 2	35 1	38 13
	1944 ..	36 6	20 1	16 11	33 6	31 11	30 7	29 3	24 3	24 11	25 4	27 4	29 3	27 6
	1945 ..	37 6	31 6	38 6	34 3	33 6	31 8	32 2	31 5	26 11	37 15	36 14	45 7	34 11
	Average ..	26 0	21 12	23 4	31 10	32 2	26 2	28 14	28 3	28 15	29 3	33 1	27 2	28 0
	1946 ..	44 0	61 0	65 0	69 13	69 13	71 4	62 8	72 8	86 11	82 8	56 11	60 13	66 14
	1947 ..	60 13	68 5	66 4	57 15	53 5	51 11	43 12	41 11	41 11	52 6	55 3	66 6	54 15
	1948 ..	N.A.	N.A.	47 4	45 7	49 0	47 4	47 4	45 7	N.A.	N.A.	N.A.	N.A.	46 15
	1949 ..	N.A.	54 6	49 1	51 1	51 1	65 7	63 10	58 3	51 0	55 10	60 0	58 3	56 2
	1950 ..	60 0	58 3	63 10	65 7	65 7	70 0	81 13	81 13	54 6	51 0	52 12	48 0	62 11
	Average ..	54 15	60 8	58 4	57 15	57 12	61 2	59 13	59 15	58 7	60 6	56 3	58 6	58 10

N.A.=Not available.

Average monthly wholesale prices of dry chillies at Malkapur, Amravati, Nagpur and Jabalpur in Madhya Pradesh, (1943-50).

(In rupees and annas per standard maund)

Name of the market	Year	MONTHS												Average
		Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
		Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.
Malkapur ..	1943 ..	26 0	26 0	25 8	25 0	25 0	25 0	25 0	24 0	30 0	30 0	35 0	29 0	27 2
	1944 ..	24 0	24 0	28 0	24 0	25 0	24 0	20 0	19 0	21 0	28 0	35 0	38 0	25 13
	1945 ..	30 0	32 0	33 0	34 0	38 0	38 0	37 0	39 0	33 0	33 0	45 0	43 0	36 4
	Average ..	26 11	27 5	28 13	27 11	29 5	29 0	27 5	27 5	28 0	30 5	38 5	36 11	29 12
	1946 ..	40 0	58 0	55 0	70 0	75 0	65 0	70 0	60 0	60 0	60 0	54 0	52 0	59 15
	1947 ..	50 4	50 12	54 13	53 0	55 0	53 0	53 0	50 0	45 0	45 0	40 0	40 0	49 2
	1948 ..	34 0	34 0	32 0	32 0	N.A.	45 0	60 0	55 0	45 0	45 0	52 8	55 0	44 8
	1949 ..	55 0	57 8	57 8	57 0	56 0	70 0	75 0	80 0	87 8	80 0	80 0	75 0	69 3
	1950 ..	75 0	77 8	60 0	60 0	60 0	60 0	60 0	75 0	75 0	75 0	90 0	90 0	71 7
	Average ..	50 14	55 9	51 14	54 6	61 8	58 10	63 10	64 0	62 8	61 0	63 5	62 6	59 2
Amravati ..	1943 ..	35 0	35 0	40 0	44 0	48 0	44 0	39 0	34 0	34 0	34 0	28 0	29 0	37 0
	1944 ..	29 0	24 12	24 0	24 12	24 12	19 0	19 12	19 0	19 0	19 0	29 0	22 11	22 14

APPENDIX NO. XXIII (*Contd.*)

Name of the market	Year	MONTHS												Average
		Jan.	Feb.	March	April	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
		Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.
	1945 ..	36 6	36 6	32 8	32 8	32 0	32 0	35 0	30 0	30 0	30 0	30 0	35 0	32 10
	Average ..	33 7	32 1	32 3	33 12	34 15	31 11	31 4	27 11	27 11	27 11	29 0	28 14	30 14
	1946 ..	46 0	45 0	55 0	50 12	50 12	48 0	48 0	45 0	51 0	51 0	53 0	45 0	49 1
	1947 ..	45 0	45 4	45 1	39 15	40 6	39 0	46 0	34 13	32 0	45 5	32 3	37 0	40 3
	1948 ..	45 0	40 0	45 0	42 8	39 0	39 0	40 8	42 8	42 8	40 0	50 0	60 0	43 13
	1949 ..	65 0	60 0	50 0	N.A.	N.A.	N.A.	N.A.	N.A.	80 0	80 0	80 0	72 8	69 10
	1950 ..	65 0	69 0	65 0	65 0	75 0	75 0	80 0	90 0	80 0	90 0	85 0	90 0	77 7
	Average ..	53 3	51 14	52 0	49 9	51 5	50 4	53 10	53 1	57 2	61 4	60 1	60 14	54 8
Nagpur ..	1943 ..	35 8	26 8	27 0	32 8	35 0	35 8	36 0	30 0	32 0	32 0	36 0	36 0	32 13
	1944 ..	32 0	25 0	29 8	29 8	29 0	29 0	26 0	25 8	25 0	21 0	22 0	24 0	26 7
	1945 ..	28 0	31 0	33 8	35 0	33 8	38 0	37 0	33 0	35 0	39 0	44 0	41 0	35 11
	Average ..	31 13	27 8	30 0	32 5	32 8	34 3	33 0	29 8	30 11	30 11	34 0	33 11	31 11
	1946 ..	58 0	62 0	56 0	55 0	55 0	59 0	60 0	55 0	56 0	52 0	53 0	58 0	56 9
	1947 ..	55 0	53 11	53 10	44 4	44 6	49 8	42 0	43 5	48 8	42 5	37 10	29 4	45 5
	1948 ..	40 0	40 0	38 10	48 0	56 0	60 0	56 0	58 0	65 0	65 0	60 0	60 0	53 13

	1949	..	65	0	65	0	56	8	62	0	70	0	72	0	75	0	75	0	76	0	80	0	82	8	75	0	71	3
	1950	..	75	8	82	8	82	8	80	0	80	0	95	0	90	0	85	0	80	0	80	0	80	0	85	0	82	15
	Average	..	58	11	60	10	57	5	57	14	61	1	67	2	64	10	63	4	65	2	63	14	62	10	62	4	62	1
Jabalpur	1943	..	37	8	37	4	34	8	38	0	38	0	43	0	43	0	43	0	39	0	39	0	39	0	39	0	39	3
	1944	..	39	0	39	0	39	0	39	0	39	0	39	0	39	0	39	0	39	0	39	0	39	0	39	0	39	0
	1945	..	39	0	39	0	39	0	42	0	42	0	42	0	42	0	42	0	38	8	42	0	42	0	42	0	40	15
	Average	..	38	8	38	7	37	8	39	11	39	11	41	5	41	5	41	5	38	13	40	0	40	0	40	0	39	11
	1946	..	42	0	50	0	65	0	65	0	65	0	65	0	65	0	65	0	65	0	62	0	59	0	55	0	60	4
	1947	..	60	5	61	0	57	8	58	8	56	12	57	0	57	0	56	8	59	0	57	4	57	6	54	0	57	11
	1948	..	55	0	60	0	60	0	55	0	55	0	65	0	55	0	65	0	55	0	57	0	55	0	70	0	58	1
	1949	..	75	0	75	0	75	0	80	0	118	0	105	0	110	0	100	0	100	0	110	0	110	0	110	0	97	5
	1950	..	100	0	95	0	90	0	110	0	110	0	119	0	120	0	135	0	135	0	135	0	125	0	116	0	115	13
	Average	..	66	7	68	3	69	8	73	11	80	15	80	3	81	6	84	5	82	13	84	4	81	4	81	0	77	13

N. A.=Not available

APPENDIX NO. XXIV

Average monthly wholesale prices of dry chillies at different markets in Bihar, (1941-50).

(In rupees and annas per standard maund)

Name of the market	Year	MONTHS												Average
		Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
		Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.
Patna ..	1941 ..	7 0	7 0	7 0	7 0	7 0	9 0	11 0	11 0	11 0	12 0	11 0	11 0	9 4
	1942 ..	11 0	9 0	9 0	10 0	10 8	10 8	10 0	8 0	6 0	N.A.	N.A.	N.A.	9 5
	1943 ..	22 0	23 0	24 8	27 0	32 8	32 8	32 8	32 8	32 8	28 12	28 12	28 12	28 12
	1944 ..	26 4	25 0	26 0	25 0	23 12	22 8	23 12	23 12	23 12	23 12	20 10	16 4	23 6
	1945 ..	16 4	20 0	21 4	21 4	21 4	21 14	28 12	30 10	28 10	37 8	41 8	43 8	27 11
	Average ..	16 8	16 13	17 9	18 1	19 0	19 4	21 3	21 3	20 6	25 8	25 8	24 14	20 8
	1946 ..	37 8	37 0	42 8	41 4	43 12	52 8	53 12	55 0	60 0	63 8	61 4	63 12	51 0
	1947 ..	56 4	47 8	42 8	38 0	36 0	36 0	36 8	38 8	39 0	35 0	36 8	32 8	39 8
	1948 ..	41 0	28 0	26 0	31 4	32 12	35 8	41 0	41 8	45 0	42 8	46 6	45 8	38 1
	1949 ..	45 8	56 10	60 0	61 6	63 0	81 12	87 8	96 0	119 8	115 4	113 2	98 0	83 2
	1950 ..	87 8	78 12	77 8	103 8	112 8	114 0	114 2	119 8	119 6	127 4	121 10	72 8	104 0
	Average ..	53 9	49 9	49 11	55 1	57 10	63 15	66 9	70 2	76 9	76 11	75 12	62 7	63 2
Mokameh ..	1941 ..	7 3	6 13	6 8	8 10	11 9	12 12	12 15	13 2	12 12	N.A.	12 10	12 9	10 11
	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	N.A.	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

	1943	..	19	2	21	4	29	3	29	8	31	6	33	9	22	3	21	4	16	14	15	5	15	5	17	14	20	6
	1944	..	19	1	23	1	23	13	24	9	24	9	20	9	22	3	21	4	16	14	15	5	15	5	17	14	20	6
	1945	..	17	13	19	8	21	1	24	9	22	7	27	0	32	1	36	4	36	8	36	8	38	0	38	14	29	3
	Average	..	14	11	16	5	18	4	19	10	21	2	22	6	24	7	22	10	21	7	23	11	22	5	22	3	20	12
	1946	..	44	8	46	3	48	3	45	10	53	2	56	4	55	0	50	0	49	10	53	0	59	4	47	6	50	11
	1947	..	45	10	47	1	44	15	35	15	41	2	42	8	42	4	36	6	35	8	33	0	30	0	29	8	38	10
	1948	..	35	8	30	0	27	8	33	0	36	8	39	0	42	10	44	0	46	0	42	0	44	8	44	8	38	12
	1949	..	47	8	50	0	54	0	60	0	61	0	78	0	83	0	95	0	99	0	106	0	87	0	68	0	74	1
	1950	..	80	0	77	0	95	0	97	8	112	8	112	8	113	12	113	12	115	0	95	0	75	0	75	0	96	13
	Average	..	50	10	50	1	53	15	54	7	60	14	65	10	67	5	67	13	69	0	65	13	59	2	52	14	59	13
	1941	..	7	1	6	11	6	9	8	0	11	2	11	11	12	1	12	1	12	8	13	0	13	8	12	8	10	9
Barh	1942	..	10	6	10	9	10	5	10	8	15	2	20	4	19	8	N.A.		N.A.		21	2	24	0	22	7	16	7
	1943	..	19	15	21	1	28	2	29	4	30	10	31	0	39	12	26	0	25	0	25	0	20	1	18	8	26	3
	1944	..	20	9	22	6	22	11	24	0	21	0	19	8	22	0	21	0	17	4	14	0	14	4	17	10	19	11
	1945	..	18	4	19	0	20	9	22	9	24	0	27	5	30	13	32	14	35	0	34	12	36	12	38	11	28	6
	Average	..	15	4	15	15	17	10	18	14	20	6	21	15	24	13	23	0	22	7	21	9	21	11	21	15	20	7
	1946	..	44	13	42	7	46	3	45	6	51	11	53	3	53	3	52	0	54	2	54	2	57	9	46	0	50	1
	1947	..	44	6	42	15	38	6	35	5	38	0	41	7	35	9	34	0	34	5	32	0	32	0	29	0	36	7
	1948	..	34	12	28	0	25	8	31	0	32	0	36	4	40	8	40	12	43	0	40	8	43	0	43	0	36	8

N.A.=Not available.

APPENDIX NO. XXIV—(*Contd.*)

Name of the market	Year	Months												Average
		Jan.	Feb.	March	April	May	June	July	August	Sept.	Oct.	Nov.	Dec.	
		Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.
	1949 ..	55 0	65 4	71 0	64 0	60 0	75 0	84 0	88 8	88 8	88 8	93 0	64 0	74 12
	1950 ..	82 0	74 0	93 0	93 0	94 0	110 0	110 0	113 0	115 0	105 0	99 0	65 0	96 1
	Average ..	52 3	50 8	54 12	53 12	55 2	63 3	64 10	65 10	67 0	64 0	64 15	49 6	58 12
Pusa Road ..	1941 ..	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
	1942 ..	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
	1943 ..	18 0	19 8	25 8	26 4	28 0	29 0	29 0	26 0	22 0	22 0	20 0	16 8	23 8
	1944 ..	23 0	25 4	20 0	20 0	21 0	21 0	18 12	16 0	17 0	14 0	12 0	11 0	18 4
	1945 ..	16 8	14 8	20 0	21 0	21 0	22 8	26 8	24 0	24 0	26 0	12 0	14 0	20 3
	Average ..	19 3	19 12	21 13	22 7	23 5	24 3	24 12	22 0	21 0	20 11	14 11	13 13	20 10
	1946 ..	40 8	40 0	44 8	45 0	46 8	54 8	52 8	40 0	43 0	42 0	40 0	35 0	43 10
	1947 ..	44 0	47 0	48 0	44 0	40 8	43 0	30 0	30 0	31 0	31 0	30 0	40 0	38 3
	1948 ..	33 0	30 8	29 0	25 0	28 8	35 6	36 8	40 0	41 0	43 0	44 8	44 0	35 14
	1949 ..	40 0	40 0	42 8	45 0	50 0	57 8	81 4	105 0	110 0	102 8	95 0	95 0	72 0
	1950 ..	70 0	75 0	85 0	88 0	110 0	110 0	97 8	100 0	82 8	82 8	65 0	63 0	85 11
	Average ..	45 8	46 8	49 12	49 6	55 2	60 1	59 9	63 0	61 8	60 3	54 14	55 6	55 1

N.A.=Not available.

Average monthly wholesale prices of dry chillies in some of the important markets in the Punjab, (1943-50).

(In rupees and annas per standard maund)

Name of market	Year	MONTHS												Average
		Jan.	Feb	March	April	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
		Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.
Panipat ..	1943 ..	15 8	16 6	16 0	16 0	16 4	20 0	23 12	23 14	21 5	18 12	20 7	19 4	18 15
	1944 ..	16 13	19 6	21 14	20 0	20 0	20 14	22 0	22 0	20 0	17 6	19 13	20 8	20 1
	1945 ..	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
	Average ..	16 3	17 14	18 15	18 0	18 2	20 7	22 14	22 15	20 11	18 1	20 2	19 14	19 8
	1946 ..	37 7	40 11	40 15	44 13	46 0	44 4	47 0	44 0	42 14	41 12	43 2	46 4	43 4
	1947 ..	52 2	49 13	51 8	44 4	37 0	30 8	32 2	36 1	40 0	42 8	40 0	38 0	41 3
	1948 ..	33 5	30 0	32 0	33 8	35 4	35 8	46 10	47 15	31 5	28 11	51 4	54 12	38 6
	1949 ..	50 14	52 11	67 4	70 0	70 0	70 0	70 0	74 13	74 6	60 0	55 0	55 0	64 3
	1950 ..	52 0	69 8	65 14	65 0	70 0	68 5	64 7	60 0	60 0	61 5	62 4	55 0	62 13
	Average ..	45 2	48 9	51 8	51 8	51 10	49 11	52 1	52 9	49 11	46 14	50 5	49 13	49 15
Moga ..	1943 ..	17 0	15 8	17 10	18 8	20 0	32 8	30 8	24 11	23 9	23 8	22 8	23 5	22 7
	1944 ..	23 6	18 8	20 2	17 0	15 3	15 0	15 8	15 6	18 0	20 10	22 3	20 0	18 7
	1945 ..	22 4	28 10	34 2	33 3	30 8	34 8	36 8	41 10	42 8	28 0	30 10	34 10	33 1
	Average ..	20 14	20 14	23 14	22 14	21 14	27 5	27 8	27 4	28 0	24 1	25 2	26 0	24 10

N.A.=Not available.

APPENDIX NO. XXV—(*Contd.*)

Name of market	Year	MONTHS												Average
		Jan.	Feb.	March	April	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
		Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.
	1946 ..	36 10	41 0	41 0	43 8	47 0	48 0	63 0	75 8	51 7	49 10	46 0	52 12	49 10
	1947 ..	55 14	54 5	47 0	48 4	43 8	39 0	40 8	40 8	42 0	40 0	39 12	43 0	44 8
	1948 ..	26 13	26 13	31 6	36 2	37 6	37 2	37 10	38 4	39 14	50 4	76 12	75 8	42 13
	1949 ..	70 2	63 8	79 2	80 0	83 5	95 8	95 0	85 6	75 4	82 9	78 12	67 6	79 11
	1950 ..	57 4	67 14	75 0	73 10	75 0	71 4	70 8	64 6	78 5	81 11	68 6	63 2	70 9
	Average ..	49 5	50 11	54 11	56 5	57 4	58 3	61 5	60 13	57 6	60 13	61 15	60 6	57 7
Ferozepur ..	1933 ..	25 8	23 11	22 4	24 8	31 8	32 8	32 14	31 2	25 0	25 0	24 0	19 8	26 7
	1944 ..	23 6	18 8	20 2	19 8	19 0	18 0	17 0	20 0	22 10	25 0	24 0	23 0	20 14
	1945 ..	26 8	31 0	33 0	37 8	36 4	34 0	36 0	33 11	35 3	31 8	35 4	37 12	34 0
	Average ..	25 2	24 6	25 2	27 3	28 15	28 3	28 10	28 4	27 10	27 3	27 12	26 12	27 2
	1946 ..	38 0	39 10	48 4	49 15	48 10	42 4	69 0	68 0	69 9	52 4	50 11	52 0	52 6
	1947 ..	59 0	62 0	59 0	37 0	37 0	34 0	48 6	55 0	42 0	34 0	38 4	40 0	45 8
	1948 ..	38 8	40 0	39 8	42 0	41 3	42 6	43 5	42 6	48 13	65 10	87 1	82 8	51 2
	1949 ..	70 0	75 0	72 0	77 8	77 8	85 2	85 0	80 14	79 12	85 0	80 0	63 2	77 9
	1950 ..	60 0	69 15	71 4	69 0	78 5	74 2	76 0	78 8	83 12	82 14	70 0	64 2	73 3
	Average ..	53 2	57 5	58 8	55 1	56 8	55 9	64 5	64 15	64 12	63 15	65 3	60 0	59 15

APPENDIX NO. XXVI

Average monthly wholesale prices of dry chillies at the Cuttack market in Orissa, (1941-50).

(In rupees and annas per standard maund)

Year	MONTHS												Average
	Jan.	Feb.	March	April	May	June	July	August	Sept.	Oct.	Nov.	Dec.	
	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.
1941	10 14	10 2	9 12	10 14	10 14	12 12	13 2	13 8	13 8	15 6	14 4	16 8	12 10
1942	13 14	14 4	14 10	14 10	14 10	16 8	19 8	19 14	19 14	23 4	26 4	37 8	19 9
1943	42 0	30 12	33 0	34 8	36 12	33 12	33 12	37 8	36 0	33 0	33 0	35 4	34 15
1944	46 14	40 2	38 10	34 14	32 4	30 12	39 6	38 12	39 6	42 6	46 8	38 10	39 1
1945	33 12	36 0	37 8	39 0	36 0	36 0	54 0	42 21	45 0	41 4	48 12	46 8	41 6
Average ..	29 8	26 4	26 11	26 12	26 2	25 15	31 15	30 8	30 12	31 1	33 12	34 14	29 8
	42 12	43 8	45 0	46 0	45 0	45 12	47 8	47 8	46 12	49 0	49 12	49 12	46 8
1946	45 8	46 12	46 12	48 0	49 8	50 0	47 0	48 0	47 8	48 0	49 0	50 8	48 1
1947	40 4	38 0	45 10	43 6	43 6	37 15	47 15	49 1	40 6	40 8	40 2	59 11	43 14
1948	76 4	81 0	79 4	76 4	71 0	76 8	80 0	102 2	95 4	118 6	99 6	98 4	87 13
1949	86 14	90 11	91 13	93 5	99 7	97 14	115 0	111 4	112 0	112 0	103 10	96 12	100 14
1950	58 5	60 0	61 11	61 6	61 11	61 10	67 8	71 9	68 6	73 9	68 6	71 0	65 7
Average													

APPENDIX NO. XXVII

Average monthly wholesale prices of dry chillies at Calcutta, (1946-50).

(In rupees and annas per standard maund)

Variety	Year	Months												Average
		Jan.	Feb.	March	April	May	June	July	August	Sept.	Oct.	Nov.	Dec.	
		Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.
Patna ..	1946 ..	60 0	60 0	58 0	58 0	53 12	57 8	58 10	57 0	59 2	62 2	67 14	66 0	59 13
	1947 ..	57 14	59 4	54 8	51 4	51 0	51 12	51 12	50 4	43 2	42 9	44 8	43 4	50 1
	1948 ..	40 0	40 12	31 12	34 13	42 8	46 6	46 0	57 0	57 3	61 4	72 10	69 6	50 0
	1949 ..	69 12	77 8	79 9	81 0	80 8	94 6	101 0	115 0	123 0	130 0	135 0	102 8	99 2
	1950 ..	105 4	106 0	108 9	120 0	124 10	129 9	136 8	129 0	132 12	137 8	105 0	84 8	118 4
	Average ..	66 9	68 11	66 8	69 0	70 8	75 15	78 12	81 10	83 1	86 11	85 0	73 2	75 7

APPENDIX NO. XXVIII

Average monthly wholesale prices of dry chillies at a few important markets in the Hyderabad State, (1941-50).

(In rupees and annas per standard maund)

Name of the market	Year	MONTHS												Average
		Jan.	Feb.	March	April	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	
		Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.
Warangal ..	1941 ..	5 9	5 11	5 1	5 0	4 10	6 5	6 11	6 4	6 1	5 10	6 14	7 6	5 15
	1942 ..	5 13	7 1	6 11	6 9	8 12	11 0	12 11	12 15	14 4	14 3	17 12	19 2	11 6
	1943 ..	19 3	19 14	24 5	24 9	25 3	23 14	20 12	19 9	19 8	21 15	18 15	16 4	21 3
	1944 ..	15 10	13 14	14 12	12 11	12 7	14 1	14 0	12 6	11 14	11 7	12 15	13 6	13 5
	1945 ..	13 2	13 3	10 4	14 7	15 3	14 9	16 11	17 3	16 6	18 0	26 4	24 14	16 11
	Average ..	11 14	11 15	12 3	12 10	13 4	13 15	14 3	13 11	13 10	14 4	16 9	16 3	13 11
	1946 ..	30 8	32 8	38 2	47 12	55 12	59 13	60 12	63 11	57 7	63 11	50 15	55 1	51 5
	1947 ..	60 0	67 11	61 10	58 14	66 10	63 11	65 11	65 2	62 13	48 14	40 5	40 11	58 8
	1948 ..	31 15	23 2	14 11	14 1	15 0	15 15	17 9	17 7	14 6	25 8	21 1	21 2	19 5
	1949 ..	21 6	25 11	30 4	35 5	37 14	42 13	42 12	44 5	40 4	50 14	61 9	64 2	41 7
	1950 ..	67 7	71 2	67 14	69 11	76 0	87 2	90 14	95 0	98 3	101 6	98 13	99 12	85 4
	Average ..	42 4	44 0	42 8	45 2	50 4	53 14	55 8	57 2	54 10	58 1	54 9	56 2	51 3

APPENDIX NO. XXVIII—(*Contd.*)

Name of the market	Year	MONTHS												Average
		Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	
		Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.
Nizamabad ..	1941 ..	6 0	5 13	5 12	5 5	5 12	4 13	5 2	5 6	7 3	8 4	9 11	11 6	6 11
	1942 ..	9 11	7 7	9 9	10 13	13 3	13 14	12 15	11 7	12 4	13 3	19 8	25 9	13 5
	1943 ..	16 13	20 0	26 9	26 13	26 0	24 10	21 4	17 12	19 0	17 0	16 8	14 14	20 10
	1944 ..	13 13	12 1	12 0	10 1	8 7	8 12	9 14	10 4	9 2	9 9	9 8	9 3	10 4
	1945 ..	7 5	9 12	8 15	9 4	10 15	10 7	12 8	12 7	13 10	14 4	16 6	23 10	12 7
	Average ..	10 12	11 0	12 9	12 7	12 14	12 8	12 5	11 7	12 4	12 7	14 5	16 15	12 10
	1946 ..	24 13	33 3	36 9	41 11	43 8	47 8	49 5	49 5	49 5	49 5	49 5	49 5	43 10
	1947 ..	35 11	43 8	43 13	44 1	45 0	46 6	50 4	47 5	42 4	32 0	52 5	54 15	44 13
	1948 ..	29 2	22 9	18 4	19 10	17 15	18 5	16 5	21 7	25 11	20 15	20 14	23 2	21 3
	1949 ..	24 10	24 10	24 10	46 3	38 13	40 8	37 2	33 12	37 2	35 0	40 0	48 5	35 14
	1950 ..	42 10	57 6	57 12	66 9	76 3	82 12	100 7	103 8	90 3	76 14	71 6	74 6	75 0
	Average ..	31 6	36 4	36 3	43 10	44 5	47 1	50 11	51 1	48 15	42 13	46 12	50 0	44 1
Hyderabad City	1941 ..	5 8	5 4	4 13	5 1	5 7	5 3	5 7	5 10	6 7	7 2	12 3	11 1	6 10
	1942 ..	8 5	7 14	8 7	10 11	11 2	12 14	12 4	11 15	14 9	14 5	15 15	22 4	12 9

1943	..	18	3	17	5	24	11	22	4	29	7	27	0	20	5	23	7	25	14	23	1	14	6	13	12	21	10
1944	..	12	6	13	4	14	10	14	3	12	15	11	5	11	5	11	15	10	5	8	13	10	5	8	12	11	11
1945	..	13	2	10	5	10	5	11	0	11	15	10	7	11	9	11	8	13	6	38	2	38	7	38	7	18	3
Average	..	11	8	10	13	12	9	12	10	14	3	13	6	12	3	12	14	14	2	18	5	18	4	18	14	14	2
1946	..	42	0	39	3	42	15	49	9	57	9	60	2	61	11	59	8	56	13	57	8	55	14	49	4	52	11
1947	..	40	14	48	14	50	0	53	7	52	5	49	2	47	2	44	5	45	7	47	7	50	9	47	7	48	1
1948	..	38	13	29	2	25	7	23	2	23	2	24	14	27	11	28	5	27	7	28	14	24	14	26	13	27	6
1949	..	27	3	27	7	29	2	35	2	40	9	41	7	43	12	39	3	43	12	49	0	51	13	58	10	40	9
1950	..	55	5	55	13	73	5	74	14	89	11	99	2	117	9	119	9	100	15	107	2	82	11	102	4	89	14
Average	..	40	13	40	1	44	3	47	4	52	10	54	15	59	9	58	3	54	14	58	0	53	3	56	14	51	11

APPENDIX No. XXIX

Average monthly wholesale prices of dry chillies at Bangalore City and Davangere markets in the Mysore State (1941-50).

(In rupees and annas per standard maund)

Name of the market	Year	MONTH												Average
		Jan.	Feb.	March	April	May	June	July	Aug.	Sep	Oct.	Nov.	Dec.	
		Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.
Bangalore City	1941 ..	8 8	7 15	10 14	10 11	10 14	10 11	12 4	13 1	11 14	11 14	10 14	15 1	11 3
	1942 ..	11 4	11 4	11 14	13 7	14 10	19 6	20 9	19 3	20 3	22 9	20 9	20 9	17 2
	1943 ..	20 0	24 15	36 6	35 7	34 13	41 12	40 6	29 4	33 4	36 3	37 3	30 4	33 5
	1944 ..	30 4	42 12	41 2	38 12	39 12	43 11	38 12	38 9	37 9	37 6	35 7	33 1	38 1
	1945 ..	32 13	37 3	42 2	41 5	40 6	42 2	45 2	53 10	57 15	73 3	61 11	55 12	48 10
	Average ..	20 9	24 13	28 8	27 15	28 1	31 8	31 7	30 12	32 3	36 4	33 2	30 15	29 11
	1946 ..	52 4	56 14	56 9	63 5	63 5	63 5	61 11	61 11	61 11	44 5	34 13	50 10	55 14
	1947 ..	63 5	63 5	66 7	64 14	63 5	63 5	66 7	56 15	63 5	63 5	63 5	63 5	63 7
	1948 ..	41 2	40 7	41 2	45 9	41 2	41 2	42 10	48 8	49 15	58 12	55 13	49 15	46 5
	1949 ..	48 8	49 15	49 15	44 1	51 7	52 14	48 8	57 5	52 14	51 7	67 9	58 12	52 12
	1950 ..	57 5	58 12	60 4	61 11	72 0	86 11	85 4	89 10	97 0	98 7	61 11	58 12	73 15
	Average ..	52 8	53 14	54 14	55 14	58 4	61 7	60 14	62 13	64 15	63 4	56 10	56 4	58 7

| | | |

APPENDIX No. XXX

Average monthly retail prices of green chillies and margin between the wholesale and retail prices of Bombay City, (1950).

(In rupees and annas per standard maund)

Months	Wholesale price	Retail price	Difference	Percentage difference
	Rs. a.	Rs. a.	Rs. a.	
January	15 10	30 14	15 4	97.6
February	21 9	N.A.	..	..
March	14 11	N.A.	..	..
April	18 0	34 11	16 11	92.7
May	12 11	29 9	16 14	133.0
June	12 2	37 5	25 3	207.7
July	15 12	37 5	21 9	136.9
August	17 1	38 9	21 8	126.0
September	17 4	27 0	9 12	56.5
October	17 14	27 0	9 2	51.0
November	17 10	28 5	10 11	60.6
December	18 6	27 0	8 10	46.9
Average	16 9	31 12	15 3	91.7

N.A.=Not available.

NOTE—The retail prices have been converted to maund basis to facilitate comparison.

APPENDIX No. XXXI

Average monthly retail prices of green chillies and margin between the wholesale and retail prices at Nagpur in Madhya Pradesh, (1950)

(In rupees and annas per standard maund)

Months	Wholesale price	Retail price	Difference	Percentage difference
	Rs. a.	Rs. a.	Rs. a.	
January	16 0	22 8	6 8	40.6
February	16 0	22 8	6 8	40.6
March	20 0	25 0	5 0	25.0
April	27 0	30 0	3 0	11.1
May	40 0	60 0	20 0	50.0
June	27 8	40 0	12 8	45.5
July	15 0	20 0	5 0	33.3
August	16 0	20 0	4 0	25.0
September	10 0	15 0	5 0	50.0
October	8 0	13 5	5 5	66.4
November	10 0	15 0	5 0	50.0
December	13 5	20 0	6 11	50.2
Average	18 4	25 4	7 0	38.4

NOTE :—The retail prices have been converted to maund basis to facilitate comparison.

APPENDIX No. XXXII

Average monthly retail prices of green chillies and margin between the wholesale and retail prices at Lucknow and Banaras in Uttar Pradesh, (1950).

(In rupees and annas per standard maund)

	LUCKNOW								BANARAS			
Variety	Desi				Sagia				Gorakhpuri			
Months	Wholesale price	Retail price	Difference	Percentage Difference	Wholesale price	Retail price	Difference	Percentage Difference	Wholesale price	Retail price	Difference	Percentage Difference
	Rs. a.	Rs. a.	Rs. a.		Rs. a.	Rs. a.	Rs. a.		Rs. a.	Rs. a.	Rs. a.	
January ..	14 0	20 0	6 0	42.9	..	..	..	..	14 0	25 0	11 0	78.6
February ..	18 0	25 0	7 0	38.9	..	..	..	..	12 0	20 0	8 0	66.7
March ..	24 0	35 0	11 0	45.8	..	..	..	..	15 0	20 0	5 0	33.3
April ..	28 0	35 0	7 0	25.0	..	..	..	..	..	..	..	..
May ..	40 0	47 8	7 8	18.8	..	..	..	..	..	..	..	..
June ..	43 0	55 0	12 0	27.9	..	..	..	..	..	..	..	..
July ..	32 0	40 0	8 0	25.0	35 0	45 0	10 0	28.6	..	..	..	..
August ..	26 0	35 0	9 0	34.6	30 0	40 0	10 0	33.3	..	..	..	..
September ..	23 0	35 0	12 0	52.2	28 0	40 0	12 0	42.9	..	..	..	..
October ..	20 0	30 0	10 0	50.0	39 0	50 0	11 0	28.2	..	..	..	..
November ..	16 0	25 0	9 0	56.3	..	..	..	..	..	..	..	..
December ..	12 0	20 0	8 0	66.7	..	..	..	..	17 0	30 0	13 0	76.5
Average ..	24 11	33 9	8 14	35.9	33 0	43 12	10 12	32.6	14 8	23 12	9 4	63.8

NOTE.—The retail prices have been converted to maund basis to facilitate comparison.

APPENDIX No. XXXIII

Average monthly retail prices of green chillies and margin between the wholesale and retail prices at Calcutta market, (1950)

(In rupees and annas per standard maund)

Months	Wholesale price	Retail price	Difference	Percentage difference
	Rs. a.	Rs. a.	Rs. a.	Rs. a.
January	25 0	30 0	5 0	20.0
February	40 0	50 0	10 0	25.0
March	50 0	60 0	10 0	20.0
April	25 0	30 0	5 0	20.9
May	30 0	40 0	10 0	33.3
June	20 0	30 0	10 0	50.0
July	25 0	30 0	5 0	20.0
August	35 0	50 0	15 0	42.0
September	50 0	60 0	10 0	20.0
October	40 0	50 0	10 0	25.0
November	25 0	30 0	5 0	20.0
December	20 0	30 0	10 0	50.0
Average	32 1	40 13	8 12	27.3

NOTE—The retail prices have been converted to maund basis to facilitate comparison.

APPENDIX No. XXXIV

Average monthly retail prices of dry chillies and margin between the wholesale and retail prices at Virudhunagar market in the Madras State, (1950).

(In rupees and annas per standard maund)

Months	Wholesale price	Retail price	Difference	Percentage difference
	Rs. a.	Rs. a.	Rs. a.	
January	95 0	103 5	8 5	8.8
February	95 5	103 5	8 0	8.4
March	76 5	83 5	7 0	9.2
April	90 0	100 0	10 0	11.1
May	88 5	100 0	11 11	13.2
June	105 0	113 5	8 5	7.9
July	110 0	120 0	10 0	9.1
August	118 5	126 11	8 6	7.1
September	103 5	116 11	13 6	12.9
October	110 0	120 0	10 0	9.1
November	88 5	97 11	9 6	10.6
December	86 11	95 0	8 [illegible]	9.6
Average	97 3	106 10	9 7	9.7

NOTE—The retail prices have been converted to maund basis to facilitate comparison.

APPENDIX No. XXXV

Average monthly retail prices of dry chillies and margin between the wholesale and retail prices at Bombay and Jalgaon, (1950).

(In rupees and annas per standard maund)

Months	Bombay				Jalgaon			
	Wholesale price	Retail price	Difference	Percentage difference	Wholesale price	Retail price	Difference	Percentage difference
	Rs. a.	Rs. a.	Rs. a.		Rs. a.	Rs. a.	Rs. a.	
January ..	54 10	69 0	14 6	26.3	62 0	93 12	31 12	51.2
February ..	66 7	70 0	3 9	5.4	62 0	95 10	33 10	54.2
March	69 8	73 12	4 4	6.1	62 0	92 8	30 8	49.2
April	70 13	75 0	4 3	5.9	68 0	95 0	27 0	39.7
May	67 11	78 2	10 7	15.4	62 0	97 8	35 8	57.3
June	59 15	82 8	22 9	37.6	67 0	99 6	32 6	48.3
July	65 15	86 14	20 15	31.8	63 0	109 6	46 6	73.6
August ..	59 8	85 10	26 2	43.9	72 0	100 0	28 0	38.9
September ..	60 11	90 10	29 15	49.3	68 0	97 8	29 8	43.4
October ..	59 9	85 10	26 1	43.8	71 0	96 12	25 12	36.3
November ..	59 15	79 6	19 7	32.4	68 0	97 8	29 8	43.4
December ..	63 13	78 12	14 15	23.4	63 0	103 2	40 2	63.7
Average ..	63 3	79 10	16 7	26.0	65 11	98 3	32 8	49.5

NOTE—The retail prices have been converted to maund basis to facilitate comparison.

APPENDIX No. XXXVI

Average monthly retail prices of dry chillies and margin between the wholesale and retail prices at Malkapur and Nagpur in Madhya Pradesh, (1950).

(In rupees and annas per standard maund)

Months	Malkapur				Nagpur			
	Wholesale price	Retail price	Difference	Percentage difference	Wholesale price	Retail price	Difference	Percentage difference
	Rs. a.	Rs. a.	R. a.		Rs. a.	Rs. a.	Rs. a.	
January ..	75 0	80 0	5 0	6.7	75 8	80 0	4 8	6.0
February ..	77 8	80 0	2 8	3.2	82 8	90 0	7 8	9.1
March	60 0	80, 0	20 0	33.3	82 8	90 0	7 8	9.1
April	60 0	65 0	5 0	8.3	80 0	90 0	10 0	12.5
May	60 0	65 0	5 0	8.3	80 0	90 0	10 0	12.5
June	60 0	65 0	5 0	8.3	95 0	120 0	25 0	26.3
July	60 0	65 0	5 0	8.3	90 0	110 0	20 0	22.2
August ..	75 0	80 0	5 0	6.7	85 0	96 0	11 0	12.9
September ..	75 0	80 0	5 0	6.7	80 0	90 0	10 0	12.5
October ..	75 0	80 0	5 0	6.7	80 0	90 0	10 0	12.5
November ..	90 0	100 0	10 0	11.1	80 0	90 0	10 0	12.5
December ..	90 0	100 0	10 0	11.1	85 0	100 0	15 0	17.6
Average ..	71 7	78 5	6 14	9.6	82 15	94 11	11 12	14.2

NOTE—The retail prices have been converted to maund basis to facilitate comparison.

APPENDIX No. XXXVII.

Average monthly retail prices of dry chillies and margin between the wholesale and retail prices at Kanpur and Lucknow in Uttar Pradesh, (1950)

(In rupees and annas per standard maund)

MARKET	KANPUR						LUCKNOW					
Variety	Patna			Patiala			Patna			Kashipur		
Month	Wholesale price	Retail price	Difference	Percentage difference	Wholesale price	Retail price	Difference	Percentage difference	Wholesale price	Retail price	Difference	Percentage difference	Wholesale price	Retail price	Difference	Percentage difference
	Rs. a.	Rs. a.	Rs. a.		Rs. a.	Rs. a.	Rs. a.		Rs. a.	Rs. a.	Rs. a.		Rs. a.	Rs. a.	Rs. a.	
January ..	87 0	110 0	23 0	26.4	85 0	110 0	25 0	29.4	88 0	100 0	12 0	13.6	80 0	100 0	20 0	25.0
February ..	85 0	100 0	15 0	17.6	78 0	105 0	27 0	34.6	85 0	100 0	15 0	17.6	85 0	110 0	25 0	29.4
March ..	78 0	110 0	32 0	41.0	75 0	100 0	25 0	33.3	80 0	100 0	20 0	25.0	86 0	110 0	24 0	27.9
April ..	75 0	100 0	25 0	33.3	72 0	90 0	18 0	25.0	80 0	100 0	20 0	25.0	88 0	120 0	32 0	36.4
May ..	78 0	110 0	32 0	41.0	75 0	100 0	25 0	33.3	82 0	100 0	18 0	22.0	90 0	120 0	30 0	33.3
June ..	80 0	110 0	30 0	37.5	78 0	110 0	32 0	41.0	85 0	100 0	15 0	17.6	90 0	120 0	30 0	33.3
July ..	85 0	110 0	25 0	29.4	80 0	110 0	30 0	37.5	90 0	100 0	10 0	11.1	88 0	110 0	22 0	25.0
August ..	88 0	110 0	22 0	25.0	85 0	110 0	25 0	29.4	92 0	120 0	28 0	30.4	88 0	110 0	22 0	25.0
September ..	90 0	120 0	30 0	33.3	88 0	120 0	32 0	36.4	92 0	120 0	28 0	30.4	80 0	100 0	20 0	25.0
October ..	95 0	120 0	25 0	26.3	90 0	120 0	30 0	33.3	94 0	120 0	26 0	27.7	78 0	100 0	22 0	28.2
November ..	100 0	120 0	20 0	20.0	95 0	120 0	25 0	26.3	92 0	120 0	28 0	30.4	70 0	100 0	30 0	42.9
December ..	90 0	120 0	30 0	33.3	90 0	120 0	30 0	33.3	90 0	120 0	30 0	33.3	75 0	100 0	25 0	33.3
Average ..	85 15	111 11	25 12	30.0	82 9	109 9	27 0	32.7	87 8	108 5	20 13	23.8	83 3	108 5	25 2	30.2

NOTE—The retail prices have been converted to maund basis to facilitate comparison.

APPENDIX No. XXXVIII

Average monthly retail prices of dry chillies and margin between the wholesale and retail prices at Calcutta market, 1950.

(In rupees and annas per standard maund)

Month	Wholesale price	Retail price	Difference	Percentage difference
	Rs. a.	Rs. a.	Rs. a.	
January	105 4	120 0	14 12	14.0
February	106 0	120 0	14 0	13.2
March	108 9	120 0	11 7	10.5
April	120 0	130 0	10 0	8.3
May	124 10	140 0	15 6	12.3
June	129 9	147 8	17 15	13.8
July	136 8	147 8	11 0	8.1
August	129 0	147 8	18 8	14.3
September	132 12	150 0	17 4	13.0
October	137 8	150 0	12 8	9.1
November	105 0	135 0	30 0	28.6
December	84 8	107 8	23 0	27.2
Average	118 4	134 9	16 5	13.8

N.B.—The retail prices have been converted to maund basis to facilitate comparison.

Average monthly retail prices of dry chillies and margin between the wholesale and retail prices at Raichur in the Hyderabad State (1950).

(In rupees and annas per standard maund)

VARIETY	DHARMABADI				JOWARI			
Months	Wholesale price	Retail price	Difference	Percentage difference	Wholesale price	Retail price	Difference	Percentage difference
	Rs. a.	Rs. a.	Rs. a.		Rs. a.	Rs. a.	Rs. a.	
January ..	48 7	60 15	12 8	25.8	46 0	60 15	14 15	32.5
February ..	50 14	68 9	17 11	34.8	48 11	68 9	19 14	40.8
March ..	62 13	68 9	5 12	9.2	61 6	68 9	7 3	11.7
April	65 11	78 6	12 11	19.3	62 13	78 6	15 9	24.8
May	74 4	91 7	17 3	23.1	71 7	91 7	20 0	28.0
June	73 15	91 7	17 8	23.7	70 15	91 7	20 8	28.9
July	89 12	109 12	20 0	22.3	80 0	109 12	29 12	37.2
August ..	98 2	137 2	39 0	39.7	85 11	137 2	51 7	60.0
September ..	97 0	137 2	40 2	41.4	94 5	137 2	42 13	45.4
October ..	70 0	109 12	39 12	56.8	65 11	91 7	25 12	39.2
November ..	51 13	68 9	16 12	32.3	50 9	54 14	4 5	8.5
December ..	—	—	—	—	67 5	78 7	11 2	16.5
Average ..	71 2	92 14	21 12	30.6	67 1	89 0	21 15	32.7

NOTE—The retail prices have been converted to maund basis to facilitate comparison.

APPENDIX No. XL.

Average monthlg retail prices of dry chillies and margin between the wholesale and retail prices at Bangalore in the Mysore State, (1950).

(In rupees annas per standard maund)

Months	Wholesale price	Retail price	Difference	Percentage difference
	Rs. a.	Rs. a.	Rs. a.	
January	57 5	82 5	25 0	43.6
February	58 12	85 11	26 15	45.9
March	60 4	75 7	15 3	25.2
April	61 11	99 7	37 12	61.2
May	72 0	89 2	17 2	23.8
June	86 11	102 14	16 3	18.7
July	85 4	113 2	27 14	32.7
August	89 10	123 7	33 13	37.7
September	97 0	123 7	26 7	27.3
October	98 7	133 11	35 4	35.8
November	61 11	96 0	34 5	55.6
December	58 12	82 5	23 9	40.1
Average	73 15	100 9	26 10	36.0

NOTE—The retail prices have been converted to maund basis to facilitate comparison.

APPENDIX NO. XLI

English translation of a typical market report circulated by a commission agent.

Tele. Address "Vir". 'OM'.

Oil seeds L. No. 5. Food Grain License No. 362.

Sangam Lal Jain & Sons,
Panipat (District Karnal).

Dear Brother,

Accept greeting from Sangam Lal Jain Sons; Panipat. On Wednesday the Katak Badi 15, year 2003 Mahavir's Pujas in the morning and Shri Saraswati and Laximi Puja in the evening, were performed with great pleasure. You would have also done which will be known on receipt of your letter.

1. *Chillies.*—This year the crop is good. The quality is excellent and there is no old stock. The new crop has started coming in and the daily arrival is 200 maunds. At this time customers are purchasing. This is an important market of chillies supplying 'Chota Phal', 'Lamba Phal' and 'Nakali Patna' varieties. Due to shortage of arrivals orders for full wagon loads are being refused. Market information received from other markets shows that up to November there is no possibility of fall in price. At the start of 'Patna crop', however, the trend of future prices will be known.

2. *Cotton.*—This year the crop is very good, quality is also good. Arrivals are low at present but are expected to increase after a fortnight. There is little export. Therefore, there is little activity in the market. There is some demand from U. P. and small quantity has started to go to Bihar.

3. *Gur.*—The condition of crop is good. The fresh stock is expected to arrive within a month. It can be exported to various destination in the Punjab and Punjab States and not to places outside the Province except under a permit.

4. *Garlic.*—Since the start of the season there have been no purchases. The rate is declining day by day. In January the old stock will be totally spoiled. New crop will start from April. In the absence of demand the rates are not expected to go up.

5. *Grains.*—Grains can not go outside the province without a permit. Even to some districts of the Province too they can only be moved under a permit. The stock of grain is much and there is no possibility of the rates going up. The stock of barley is less. The arrival of maize is satisfactory. Arrival of Bajra is less. It is hoped that the rates of Maize and Bajra will not decline.

6. *Cotton seed.*—There is no stock and the new arrivals have not started as yet. In this area cotton seed of desi variety is

available. The rates are not expected to fall. Export to destinations outside the Province is prohibited except under a permit.

7. *Sarson oil.*—It cannot be exported without a permit. The rates are not expected to fall and sufficient stock is available.

8. *Sarson.*—The stock is little and there is demand from Punjab and local mills. It cannot go out of the Province without a permit.

9. *Oil cakes.*—There is no stock. Demand is for local consumption and as well as from the Punjab. It cannot be exported out of the Province except under a permit. The rates are not expected to fall.

10. *Onions.*—On this side the estimated balance of stock is 10 thousand maunds. This year the quality was good. This stock is expected to be cleared up to December. It is mostly going to Bengal. This is a very big market for onions.

11. *Potatoes.*—Sowings have finished and it is more than last year. It cannot go outside the Province except under a permit. At the present time potato is coming from Simla. The new crop is expected within 2 months. Loading, practically for all places and for all types of goods is open. Occasionally it is stopped but is opened again after some time.

The following current rates may be noted:—

Red chillies.

Rs. 45|- to Rs. 50|-

Garlic

Rs. 8|- to Rs. 12|-

Methi

Rs. 13|-

Cotton

1997	1998	1999	2000	New	Gur old
Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
30|-	27|-	30|-	32|-	35|- to 36|-	16|- to 17|-

Cotton seed old	*New*	*Sarson oil*	*Sarson*
Rs.	Rs.	Rs.	Rs.
12|- to 13|-	14|-	41|-	15|8 to 16|-

Onion	*Potato*	*Gram*	*Bajra*	*Maize*	*Mash*	*Mung.*
Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1|8 to 2|8	18|-	7|-	7|4	6|8	16|8	12|-

Note:—At this place, for all goods, a maund is 40 seers (Bengal) of 80 tolas each.

APPENDIX XLII.

Army Services Corps Specification No. 27 (New Series).

Chillies.

1. *Quality.* (i) The chillies shall be of any of the red varieties with stalks. They shall be unbroken, and in all respects fit for human consumption.

(ii) The chillies shall be of the current season's crop, in dry sound condition, and of bright colour and free from moulds, insects and foreign matter.

2. *Marking.* The chillies shall be packed in contractors' non-returnable single sound "B" twill trade bags of a size suitable for holding 40 lb. of chillies. The mouths of the bags shall be rolled over and stiched securely with strong jute twine with twelve to fourteen stiches and properly fastened off.

3. *Marking.* The following particulars shall be stencilled on one side of each bag:-

(i) Description of contents, *e.g.* Chillies.

(ii) Net weight.

(iii) Date of delivery.

(iv) Name of Supplier.

4. *Inspection.*—Inspection shall be carried out by the Director of Supplies and Transport or an Officer acting on his behalf on all supplies tendered for acceptance. The decision of this officer shall be final.

The chillies shall conform to the following analysis:

(i) Moisture—not more than 10%

(ii) Broken chillies and loose seed—not more than 5% (by wight)

(iii) Discoloured pods—not more than 2%.

The method used for the estimation of moisture shall be as laid down in Appendix I.

APPENDIX I

Preparation of the sample—The stalks shall be removed. The sample shall then be quartered in the normal manner and the portion taken for analysis ground to a power which shall pass through a 20 mesh (to a linear inch) sieve.

After preparing a thoroughly representative sample by quartering, it should then be finely divided and carefully mixed. Take 10 grms. and dry a 100°C for 1 hour, cool in a dessicator and weigh. The percentage loss in weight should be recorded as the moisture content.

APPENDIX No. XLIII.

Average annual turn-over of chillies in some of the important distribution markets in different States in India.

(In maunds of 82 2/7 lb.)

State	Name of market	Approximate annual turn-over (maunds)
1. Madras	Tuticorin ..	715,000
	Dhanushkodi	300,000
	Calicut ..	100,000
	Guntur ..	100,000
	Vellore ..	75,000
	Madurai ..	75,000
	Virdhunagar ..	75'000
	Madras ..	72,000
	Erode ..	70,000
	Tiruneludi ..	70,000
	Hindupur ..	50,000
	Pollachi ..	35,000
2. Bombay	Byadgi ..	180,000
	Bombay ..	350,000
	Nandurbar and Dondaicha	60,000
	Poona ..	27,000
	Sholapur ..	15,000
	Jalgaon ..	6,500
	Nasik ..	6,000
3. Madhya Pradesh	Nagpur ..	20,000
	Malkapur ..	15,000
	Bhiwapur ..	10,000
	Ellichpur ..	10,000
	Umrer ..	9,100
	Shehgaon ..	6,000
	Dhamangaon ..	5,000
	Pathrot ..	5,000
4. Bihar	Maroofganj (Patna) ..	125,000
	Shahpur Patroi	90,000
	Dalsingsarai ..	80,000
	Barauni ..	75,000
	Khagria ..	75,000
	Samastipur ..	70,000
	Mokameh ..	65,000
	Barh ..	50,000
	Rusera Ghat ..	50,000
	Pusa Road ..	35,006
	Bakhtiarpur ..	25,000
	Dholi ..	25,000
5. Uttar Pradesh.	Kanpur ..	100,000
	Kairana ..	35,000
	Sarkara ..	12,000
	Ramnagar ..	20,000
6. Punjab	Murthal ..	45,000
	Panipat ..	22,500
	Amritsar ..	22,500
	Ferozepore ..	19,000
	Gharunda ..	17,500
	Ganaur ..	17,500
	Samalkha ..	13,500
	Sonepat ..	11,000
	Nakodar ..	6,000
7. Assam	Karimganj ..	20,000
	Nowgong ..	5,000
	Jorhat ..	5,000
	Dibrugarh ..	4,000
8. Orissa	Cuttack ..	20,000
	Berhampur ..	10,000
	Bhadrak ..	5.000
	Khurda Road (Jatni)	4,000
9. West Bengal.	Calcutta ..	325,000
10. Hyderabad.	Warangal ..	68,250
	Nizamabad ..	39,724
	Dharmabad ..	35,742
	Peddapalli ..	28,115
	Raichur ..	18,682

APPENDIX No. XLIV.

Market charges for chillies in some regulated markets in the Bombay State

Name of the market	Commission			Brokerage			Weighing			Hamali		
	Unit	Rate	Recoverable from	Unit	Rate	Recoverable from	Unit	Rate	Recoverable from	Unit	Rate	Recoverable from
Byadgi ..	Per Re.	Rs. a. p. 0 0 1½ 0 0 ½	+ Seller & Buyer.	Per Rs. 100.	Rs. a. p. 1 0 0	Seller	Per Andgi*	Rs. a. p. 0 0 6	Seller	Per Andgi*	Rs. a. p. 0 1 6 D.A. 0 0 6	Seller.
Karmala ..	Per Rs.100	D. A. 1 0 0	Seller	Do.	0 8 0	Buyer	Per bag ..	0 0 3	Do.	Per bag ..	0 2 0	Do.
Dondaicha ..	Do.	1 0 0	Do.	..	..	..	Wet per standard maund.	0 0 5	Do.	Per standard maund.	0 1 0	Seller and Buyer.
							Dry ..	0 0 6	Do.			
Nandurbar ..	Do. ..	0 12 0	Do.	..	..	..	Wet per standard maund.	0 0 5	Do.	Wet per standard maund.	0 0 6	Seller.
							Dry ,,	0 0 6		Dry ,,	0 1 0	Do.
Sankeshwar ..	Per Re.	0 0 1½ D.A. 0 0 ½	+ Do.	..	..	..	Per Bodh of 2 maunds.	0 0 4	Do.	Per Bodh of 2 maunds.	0 1 6 0 1 0	Seller and Buyer.
Gadinglaj ..	Per Re. of sale proceeds.	0 0 3	Do.	..	..	..	Per bag ..	0 0 4	Do.	Per bag ..	0 0 6	Seller.
							Per Bodh.	0 0 9	Do.	Per Bodh	0 1 0	Do.
Shalod ..	Per Rs.100 of sale proceeds.	0 12 0	Do.	Per 6 standard maund	0 0 9	Seller	Per 6 standard maund.	0 3 0	Do.	Weighing includes Hamali charges		

D.A. = Dearness allowance. Bodh = 2 standard maunds. Andgi—8 quarters of 28 lb. each.

APPENDIX No. XLV.

Market charges on the sale of chillies in some regulated markets in the Punjab.

(Per Rs. 100 except when otherwise stated)

Sl. No. and place	Paid by the seller								Paid by the buyer				
	Commission	Brokerage	Weighing	Bagging	Palledari	Karta	Dharman	Total	Commission	Brokerage	Bagging	Palledari	Total
1. Ambala City	Rs. a. p. 1 0 0	Rs. a. p. 0 2 0	Rs. a. p. 0 3 6	Rs. a. p. ..	Rs. a. p. ..	Rs. a. p. ..	Rs. a. p. ..	Rs. a. p. 1 5 6	Rs. a. p. ..	Rs. a. p. ..	Rs. a. p. 0 2 0	Rs. a. p. ..	Rs. a. p. 0 2 0
2. Ambala Cantt.	1 0 0	0 2 0	0 3 0	0 2 0	..	..	..	1 7 0	0 8 0	..	..	..	0 8 0
3. Panipat ..	1 0 0	..	0 0 3 per bag.	..	..	..	..	1 0 0+ 0 0 3 per bag.	..	0 2 0	0 2 0	..	0 2 0+ 0 2 0 per bag.
4. Karnal ..	1 0 0	0 2 0	0 3 6	..	..	..	..	1 5 6	..	..	..	..	..
5. Sonepat ..	..	..	0 3 6	..	..	..	..	0 3 6	0 8 0 to 1 0 0	0 8 0	0 1 0 per bag.	..	1 0 0 to 1 8 0+ 0 1 0 per bag.
6. Jagraon ..	0 13 6	0 2 6	0 3 6	..	..	..	..	1 3 6	0 12 6	..	0 0 9 per bag.	..	0 12 6+ 0 0 9 per bag.
7. Ludhiana ..	1 0 0	0 2 6	0 3 6	..	..	..	..	1 6 0	..	..	0 0 6 per bag.	..	0 0 6 per bag.
8. Malout ..	1 0 0	0 1 0	0 3 6	0 0 9 per bag.	..	..	..	1 4 6+ 0 0 9 per bag.	..	..	..	..	..
9. Fazilka ..	1 0 0	0 2 0	0 3 6	..	0 2 6	..	..	1 8 0	0 8 0	..	0 0 6 per bag.	..	0 8 0+ 0 0 6 per bag

												per bag.	per bag.	per bag.
11. Ferozepur ..	2 0 0	0 5 0	0 7 0	..	..	..	..	2 12 0	..	0 7 0		..	..	0 7 0
12. Hansi ..	1 0 0	0 2 6	0 1 9	..	..	..	..	1 4 3	0 8 0	0 2 6	0 1 6 per md.	0 1 9		0 12 3+ 0 1 6 per md.
13. Sirsa ..	1 0 0	0 2 6	0 3 6	..	..	..	..	1 6 0	..	..	0 2 0 per bag.	..		0 2 0 per bag.
14. Naqodar ..	1 0 0	0 2 0	0 3 6	..	..	..	..	1 5 6	0 8 0	0 2 0	0 2 0 per bag.	..		0 10 0+ 0 2 0 per bag.
15. Jullundur Cantt. ..	1 0 0	0 2 6	0 2 6	..	..	..	..	1 5 0	..	..	0 1 0 per bag.	..		0 1 0 per bag.
16. Gurdaspur ..	1 0 0	0 1 6	..	..	..	..	..	1 1 6	..	..	0 3 6*	0 3 6		0 6 6
17. Hoshiarpur ..	1 0 0	0 2 0	0 3 6	0 3 6	..	..	..	1 9 0	..	..	..	..		..
18. Nawanshehar	1 0 0	0 2 0	0 3 6	0 3 6	..	..	..	1 9 0	..	..	..	..		..
19. Tarn Taran ..	1 0 0	..	0 3 6	..	..	..	..	1 3 6	1 0 0	0 2 0	0 1 0	..		1 3 0
20. Amritsar ..	2 0 0	0 5 0	0 7 0	..	..	..	..	3 5 0	..	..	0 1 0 per bag. + 1/2 pice for sutli	..		0 1 0 per bag. 1/2 pice for sutli.
21. Rupar ..	1 0 0	0 2 0	0 3 6	..	0 3 6	1/2 Seer per md.	..	1 9 0	..	..	..	..		..
22. Abhor ..	1 0 0	0 2 6	0 3 6	..	..	..	..	1 6 0	0 10 0	0 2 6	0 1 0 per bag.	..		0 12 6+ 0 1 0 per bag.
23. Gharunda ..	1 2 9	..	0 6 3	..	..	..	..	1 9 0	1 9 0	..	0 0 6	..		1 9 6

*1/3% returned to seller if he opens the bags himself and makes a heap.

Glossary of vernacular terms

A

Andgi — Unit of weight in the Bombay State generally equal to 8 quarters, *i.e.*, 224 lb. in all At some places it is equal to 5 to 6 local maunds of 26-1|2 lb. each.

Andka — Container made of palm-leaf matting in the Hyderabad State.

Atki — Unit of weight in Bombay equal to 8 maunds of 28 lb. each *i.e.*, 224 lb.

B

Baranai — Non-irrigated crop.

Barik — Fine-chilli powder of fine quality.

Barri — A preparation made of pulses used in curries.

Bodh — A unit of weight in the Bombay State equal to 2 standard maunds.

C

Chaiti — Small sized inferior chillies borne after the main harvest.

Charki — A mixture of different varieties of chillies.

D

Dala — A big basket.

Dami — Extra commission charged by commission agents, out of which some rebate is given.

Dandi-cut — Chilli fruits of which stalks have been cut off.

Dewra — Medium quality.

Dhalta — Extra quantity taken to make up for the extraneous matter and loss in weight due to shrinkage.

Dharman — Charity.

Dhobli — Large sized.

F

Fatki — A mixture of different varieties of chillies.

G

Gaddikharach — Establishment charges.

Ganj — Wholesale market.

Geru — Red clay.

Gola or Gola Bazar	—	Wholesale market.
Gowshala	—	Charity homes for looking after old and inferior cows.
Hamali	—	Handling charges.
Hat	—	A periodical market.

J

Jadhi	—	Medium quality chilli powder.

K

Kutcha road	—	Non-metalled road.
Kandy	—	A unit of weight equal to 21 maunds of 28 lb. each *i.e.*, 588 lb.
Kangi	—	A round receptacle made of cotton sticks or split bamboos plastered with mud.
Karda	—	Excess quantity given to the buyer to make up for the extraneous matters and loss due to shortage.
Karta	—	Same as karda.
Khandy	—	A unit of weight generally equal to 6 standard maunds but at some places the weight is different.
Kutcha	—	Made of dried mud.

M

Mandi	—	Market.
Mufassil	—	Suburban.

N

Nag	—	A unit of weight of 9 maunds of 28 lb. each *i.e.*, 252 lb.
Neem	—	Margora tree.

P

Palla	—	A unit of weight of 96 or 120 standard seers.
Palledari	—	Payment made to labourers who hold the bags during filling and weighing.
Papar	—	Wafers made of pulse flour mixed with condiments and spices.
Patri	—	Inferior quality chilli powder.
Pucca	—	Solid.

S

Satta	—	A unit of weight of 8 maunds of 24 lb. each *i.e.*, 192 lb.
Shandy	—	A periodical market.
Sutli	—	Twine.

T

Tahrir — Letter writing charges.

Taluk — Assessment circle or an Estate.

Tibi — Raised platform used for drying chillies.

Toddy mats — Mats made of leaves of palmyra trees.

Z

Zamindars — Landlords.

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